

**Suburban Fortunes:  
Urban Policies, Planning and Suburban Transformation  
in Tokyo Metropolis**

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## Abstract

Over recent decades, Tokyo's suburban territory has experienced new path-dependent, multifaceted restructuring in the context of stagnation and/or decline, which has been materialised by interactions among urban policies, economic restructuring and socio-demographic transformation. In this process, Tokyo's suburban territory has been increasingly isolated in political and administrative, economic and socio-demographic terms, incorporating the multi-dimensional divergence of outer suburban municipalities. Consequently, municipal governments and other local actors have been left to tackle suburban shrinkage alone under the retreat of upper-level governmental entities and global economic actors. Exploring underlying mechanisms, this research reveals that the multi-dimensional suburban isolation has been created by the metropolitan-wide dynamics of inter-governmental, inter-sectoral and inter-actor dynamics. It also reveals that the multi-dimensional outer suburban divergence has been created by local-wide differentiations of these metropolitan-wide dynamics, resulting in the difficulty of inter-municipal collaboration especially for industrial and commercial promotion. Consequently, Tokyo's suburban territory has been degenerating from 'post-suburban' spaces to balkanised spaces with less diverse activities. Especially, its economy has been increasingly localised with weakened linkages to external territories including global economic circuits. Now, integrated suburban economic development is crucial for the future suburban sustainability and regeneration of Tokyo Metropolis. In this vein, this research proposes a new approach of integrated urban-suburban economic development that ensures multi-dimensional urban-suburban linkages to create new platforms for collaborations among different actors for suburban economic development. This approach can be established by creating new modes of inter-governmental, inter-sectoral and inter-actor dynamics. Through this approach, Tokyo's suburban territory would be re-positioned within vertically and horizontally integrated economic spaces under inter-governmental and intra-governmental integrations. Then, on the basis of Tokyo's empirical evidences, this research concludes the importance of evolutionary perspective-based investigations into active and latent dynamics within various suburban transformations worldwide, as well as proposes policy and planning implications for other large metropolises.

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## Table of Contents

<b>Declaration .....</b>	<b>2</b>
<b>Abstract .....</b>	<b>3</b>
<b>Acknowledgements .....</b>	<b>4</b>
<b>List of Figures .....</b>	<b>10</b>
<b>List of Tables .....</b>	<b>13</b>
<b>List of Abbreviations .....</b>	<b>14</b>
<b>Chapter 1    Introduction .....</b>	<b>16</b>
1.1    Overview of the Thesis.....	16
1.1.1    Emergence of New Path-dependent, Multifaceted Suburban Restructuring of Tokyo Metropolis .....	16
1.1.2    Tokyo's Suburban Restructuring Worthy of Research for Contemporary Suburban Debates.....	18
1.1.3    Towards Policy and Planning Implications for Suburban Sustainability and Regeneration.....	22
1.2    Structure of the Thesis .....	26
<b>Chapter 2    Contextualising Suburban Restructuring of Tokyo Metropolis in                     International and Domestic Debates.....</b>	<b>29</b>
2.1    Chapter Introduction.....	29
2.2    Urban Agglomerations as Command-and-Control Centres of Global Economy .....	29
2.3    Metropolitan Spatial Transformation: from Fordist Monocentricity to Post-fordist Polycentricity.....	31
2.4    Contemporary Suburban Space as a Subject of Worthy of Research .....	35
2.5    Suburban Transformations of Large Metropolises from an Evolutionary Perspective .....	37
2.5.1    Suburbanisation and Suburbia .....	37
2.5.2    Emergence of a Post-suburban World under Polycentric Formation.....	39
2.5.3    Shrinking Cities and Suburban Decline .....	41
2.5.4    Future Possibilities of Outer Suburban Shrinkage .....	46

2.6	New Perspectives in a Post-suburban World.....	46
2.6.1	Suburban Politics and Governance as an Important Research Agenda .....	46
2.6.2	Key Perspectives to Explore Suburban Politics and Governance.....	50
2.7	Recent Conceptual and Theoretical Approach for Suburbanisation and Post-suburbanisation .....	53
2.8	Chapter Conclusion: Necessity to Explore Underlying Political and Policy Dynamics in Tokyo's Suburban Restructuring .....	56
<b>Chapter 3</b>	<b>Research Area, Significance of Research and Research Questions .....</b>	<b>57</b>
3.1	Chapter Introduction.....	57
3.2	Research Area: Tama Area as Tokyo's Suburban Territory .....	57
3.3	Current Issues and Problems Surrounding Tokyo's Suburban Territory .....	66
3.4	Research Questions and Significance of Research .....	69
3.5	Chapter Conclusion: Necessity to Explore Path-dependent, Multifaceted Phenomena within Tokyo's Suburban Restructuring .....	77
<b>Chapter 4</b>	<b>Research Methodologies .....</b>	<b>78</b>
4.1	Chapter Introduction.....	78
4.2	Overall Research Process .....	78
4.3	Integrated Application of Quantitative and Qualitative Approaches.....	80
4.4	Methods in Quantitative and Qualitative Approaches .....	82
4.4.1	Multivariate Analyses of PCA and CA .....	82
4.4.2	Semi-structured and Non-structured Interviews .....	86
4.5	Detailed Explanations by Constituent Stage.....	90
4.6	Chapter Conclusion: Necessity of Two-stage Analysis by Integrated Application of Quantitative and Qualitative Approaches .....	95
<b>Chapter 5</b>	<b>Key Policy Development and Suburban Transformation of Tokyo Metropolis from an Evolutionary Perspective .....</b>	<b>96</b>
5.1	Chapter Introduction.....	96
5.2	History of Tokyo's Suburban Territory before WWII .....	96
5.3	Urban Policies and Tokyo's Suburban Transformations after WWII .....	100
5.3.1	Different Phases of Suburbanisation and Post-suburbanisation .....	100
5.3.2	Urban Policies at Each of Differentiated Urbanisation Phases .....	103
5.4	Positioning of Time Periods of '1975 to 1995' and '1995 to 2015' within	

	Tokyo's Long-term Urbanisation Process .....	124
5.5	Chapter Conclusion: Necessity to Explore Time Periods of '1975 to 1995' and '1995 to 2015' from an Evolutionary Perspective .....	126
<b>Chapter 6</b>	<b>Analysing New Suburban Restructuring of Tokyo Metropolis through Quantitative Approach.....</b>	<b>127</b>
6.1	Chapter Introduction.....	127
6.2	Relative Dynamics between Urban and Suburban Territories .....	127
6.3	Multivariate Analyses of Suburban Municipalities by PCA and CA.....	129
6.3.1	Identification of Growth and/or Decline Types for Shrinkage Period of '1995 to 2015' from the Perspective of Short-term Development Paths.....	129
6.3.2	Identification of Growth and/or Decline Types for Growth Period of '1975 to 1995' from the Perspective of Short-term Development Paths.....	139
6.3.3	Identification of Different Trajectories of Suburban Municipalities from the Perspective of Long-term Development Paths .....	148
6.4	Key Findings through Quantitative Approach: Review on Analysis Results of PCA and CA .....	148
6.5	Selection of Case Studies: Different Trajectories of Tachikawa City, Hachioji City and Ome City .....	160
6.6	Chapter Conclusion: Necessity to Explore Outer Suburban Divergence under Multi-dimensional Urban-suburban Divide Captured from the Perspective of Three P's .....	162
<b>Chapter 7</b>	<b>Anatomising New Suburban Restructuring of Tokyo Metropolis from a Metropolitan Perspective through Qualitative Approach .....</b>	<b>163</b>
7.1	Chapter Introduction.....	163
7.2	Retreat from Polycentricity: Failure to Foster Suburban Resilience against Shrinkage .....	163
7.3	Recently Emerged Divergence of Greater Mobile Actors .....	166
7.3.1	Political and Policy Shift of GOJ towards Provincial Areas .....	166
7.3.2	Continuously Increased Stress of TMG on Metropolitan City Centre .....	169
7.3.3	Retreat of Large-scale Enterprises as Global Economic Actors .....	170
7.4	New Suburban Struggles under Retreat of Greater Mobile Actors.....	172
7.5	New Inter-sectoral Policy Shift: Different Causal Relationships by Policy Domain for Retreat from Tokyo's Suburban Territory.....	175

7.5.1	From the Policy Perspective of Urban and Infrastructure (Re)development .....	175
7.5.2	From the Policy Perspective of Social Welfare Improvement .....	180
7.5.3	From the Policy Perspective of Industrial and Commercial Promotion .....	181
7.6	Localisation of Political and Planning Agendas and Increased Limitations for Wider Economic Development in Municipal-level Public Affairs .....	186
7.7	New Local Movements of Lesser Mobile Actors and Their Foreseen Difficulties .....	188
7.7.1	New Business Entrepreneurship Movements .....	189
7.7.2	New Local Community Movements .....	190
7.8	Suburban Balkanisation under Metropolitan-wide Three I's Dynamics: Degeneration from Post-suburban Space and Increasingly Localised Suburban Economy.....	195
7.9	Chapter Conclusion: Necessity of New Modes for Suburban Economic Development .....	200
<b>Chapter 8</b>	<b>Anatomising Different Trajectories of Tachikawa City, Hachioji City and Ome City from a Local Perspective through Qualitative Approach .....</b>	<b>201</b>
8.1	Chapter Introduction.....	201
8.2	Introduction to Tachikawa City, Hachioji City and Ome City .....	201
8.3	Different Trajectories of Tachikawa City, Hachioji City and Ome City .....	207
8.3.1	Recent Socio-demographic Transformation .....	207
8.3.2	Recent Economic Restructuring .....	209
8.3.3	Recent Urban Policies .....	215
8.4	Reflecting Different Trajectories of Tachikawa City, Hachioji City and Ome City: Local Differentiations of Metropolitan-wide Three I's Dynamics.....	224
8.5	New Horizons of Inter-municipal Collaboration under Suburban Shrinkage ...	228
8.5.1	Increased Difficulty for Inter-municipal Collaboration .....	228
8.5.2	Increasingly Intertwined Futures among Suburban Municipalities ...	230
8.5.3	Limited Inter-municipal Collaboration within Policy Domain of Social Welfare Improvement .....	231
8.6	Chapter Conclusion: Necessity of New Modes of Inter-municipal Collaboration for Industrial and Commercial Promotion .....	233
<b>Chapter 9</b>	<b>Suburban Challenges: Policy and Planning Implications for Tokyo Metropolis and Conceptual and Theoretical Contributions to Contemporary Suburban Debates .....</b>	<b>235</b>

9.1	Towards Future Suburban Sustainability and Regeneration .....	235
9.2	Proposed Policy and Planning Implications for Tokyo Metropolis .....	235
9.2.1	New Approach of Integrated Urban-Suburban Economic Development.....	235
9.2.2	New Modes of Inter-governmental, Inter-sectoral and Inter-actor Dynamics .....	238
9.3	Lessons Learnt from Tokyo Metropolis: Possible Policy and Planning Implications for Other Large Metropolises Worldwide .....	248
9.4	Conceptual and Theoretical Contributions to Contemporary Suburban Debates .....	252
9.4.1	Tokyo's Suburban Transformation as Typical Suburban Development Process under Suburban Shrinkage .....	252
9.4.2	Reframing into Active and Latent Dynamics of Three I's Dynamics from a Path-dependent Perspective .....	254
9.4.3	Towards New Horizons of Contemporary Suburban Debates.....	260
<b>References</b>	.....	<b>262</b>
<b>Appendices</b>	.....	<b>284</b>
Appendix A	.....	285
Appendix B	.....	288
B-1	.....	288
B-2	.....	289
B-3	.....	291
B-4	.....	293

## List of Figures

Figure 2-1	Centripetal and Centrifugal Forces in Metropolitan Transformation .....	34
Figure 3-1	Location of Tokyo Metropolis within National Capital Region .....	58
Figure 3-2	Tokyo's Suburban Territory alongside JR Chuo Line .....	61
Figure 3-3	Tokyo's Suburban Territory Viewed from Mt. Takao in Hachioji City .....	61
Figure 3-4	Tokyo's Suburban Territory: Administrative Units of Tokyo Metropolis in Mainland.....	63
Figure 3-5	Tokyo's Suburban Territory and Transport Networks .....	64
Figure 3-6	Trajectories of Annual Growth Rates of Urban and Suburban Population and Employment (Workplace).....	67
Figure 3-7	Population Projection for Administrative Units of Tokyo Metropolis .....	68
Figure 3-8	Three P's Analytical Framework: Interactions among Urban Policies, Economic Restructuring and Socio-demographic Transformation .....	71
Figure 3-9	Simplified Relationship of Targeted Urban Policies with Economic Restructuring and Socio-demographic Transformation .....	72
Figure 4-1	Simplified Diagram of Policy Making and Implementation under Japanese Political and Administrative System .....	87
Figure 4-2	Specific Dynamics Embodied within Tokyo's Suburban Restructuring of Three P's.....	89
Figure 4-3	Conceptual Diagram for Growth and/or Decline Types: Short- and Long-term Development Paths .....	91
Figure 4-4	Conceptual Diagram for Different Trajectories on New Coordinate System of PCs .....	92
Figure 5-1	Past Post Station in Hachioji City.....	97
Figure 5-2	Chronology of Administrative Annexations within Tokyo's Suburban Territory .....	99
Figure 5-3	Past Trends of Urban and Suburban Populations after WWII .....	101
Figure 5-4	Historical Changes of DIDs after WWII.....	101
Figure 5-5	Past Trends of Manufacturing Production during 1970s to 2010s.....	102
Figure 5-6	Past Trends of Commercial Consumption during 1970s to 2010s .....	102
Figure 5-7	Unrealised Greenbelt and Industrial Satellite Cities in First NCRDP of 1962 .....	105
Figure 5-8	Hachioji City and Ome City Planned as Industrial Satellite Cities in First NCRDP of 1962 .....	105
Figure 5-9	Designated Zones for Locational Control of Manufacturing Factories and University Campuses .....	106
Figure 5-10	New Land Use Zoning for Tokyo's Suburban Territory as of 1969.....	108

Figure 5-11	Concept of Twin Cores in Tokyo Concept Plan of Plaza and Blue Sky of 1971 .....	109
Figure 5-12	TNT Development Plan.....	110
Figure 5-13	TNT City Centre in Tama City .....	110
Figure 5-14	Multi-polar, Self-contained City-regions in Capital Reform Plan of 1985.....	113
Figure 5-15	Multi-core Urban Structure in Second Long-term Plan of Tokyo Metropolis of 1987 .....	114
Figure 5-16	Original Plan of Tama Monorail in First Long-term Plan of Tokyo Metropolis of 1982 .....	114
Figure 5-17	Tama Monorail Passing through Tachikawa City .....	115
Figure 5-18	Shinjuku Subcentre within Tokyo's Urban Territory.....	116
Figure 5-19	Tokyo Water Front City within Tokyo's Urban Territory .....	117
Figure 5-20	Ringed Megalopolis in Tokyo Vision 2000 .....	118
Figure 5-21	Marunouchi Area near JR Tokyo Station.....	120
Figure 5-22	Recent TMG's Policy Direction for Urban Renewal .....	122
Figure 5-23	TAMA as Designated Area for Industrial Cluster Project .....	123
Figure 6-1	Plotted PC1 and PC2 Scores of Suburban Municipalities for Shrinkage Period of '1995 to 2015' .....	131
Figure 6-2	PC1 and PC2 Loadings of Original Variables for Shrinkage Period of '1995 to 2015' .....	132
Figure 6-3	Standardised Average Values of Representative Variables for Clusters 1 to 5 [Shrinkage] during '1995 to 2015' .....	135
Figure 6-4	Spatial Distribution of Clusters 1 to 5 [Shrinkage] for Shrinkage Period of '1995 to 2015'.....	137
Figure 6-5	Plotted PC1 and PC2 Scores of Suburban Municipalities for Growth Period of '1975 to 1995'.....	141
Figure 6-6	PC1 and PC2 Loadings of Original Variables for Growth Period of '1975 to 1995' .....	142
Figure 6-7	Standardised Average Values of Representative Variables for Clusters 1 to 5 [Growth] during '1975 to 1995'.....	145
Figure 6-8	Spatial Distribution of Clusters 1 to 5 [Growth] for Growth Period of '1975 to 1995' .....	147
Figure 6-9	Different Trajectories of Suburban Municipalities within Contextual Transition from Growth to Shrinkage .....	149
Figure 6-10	Different Trajectories: Outer Suburban Divergence against Inner Suburban Convergence.....	161
Figure 7-1	Nation-wide Projection of Population Aging.....	167
Figure 7-2	Locations of MIE, Linear Motor Car and Yokota Airfield .....	177
Figure 7-3	Metropolitan-wide Three I's Dynamics: from Three P's Analytical Framework to Three I's Anatomical Framework .....	197

Figure 8-1	Locations of Tachikawa City, Hachioji City and Ome City.....	202
Figure 8-2	Aerial Photograph of Tachikawa City .....	204
Figure 8-3	Future Urban Structure of Tachikawa City .....	204
Figure 8-4	Aerial Photograph of Hachioji City .....	205
Figure 8-5	Future Urban Structure of Hachioji City .....	205
Figure 8-6	Aerial Photograph of Ome City .....	206
Figure 8-7	Future Urban Structure of Ome City .....	206
Figure 8-8	Developed Residential Condominiums in Hachioji City.....	208
Figure 8-9	Fareit Tachikawa and Tama Monorail .....	210
Figure 8-10	JR Tachikawa Station Building .....	210
Figure 8-11	City Centre of Hachioji City .....	212
Figure 8-12	Local Event in Hachioji City .....	212
Figure 8-13	Surrounding Areas of JR Ome Station.....	213
Figure 8-14	Vacant Building after Relocation of Large-scale Food Shop .....	214
Figure 8-15	Local Differentiations of Metropolitan-wide Three I's Dynamics for Tachikawa City, Hachioji City and Ome City .....	227
Figure 9-1	Conceptual Spatial Diagram for Integrated Urban-suburban Economic Development .....	236
Figure 9-2	Towards Policy and Planning Implications based on Major Key Findings .....	239
Figure 9-3	Relationship of New Modes of Three I's Dynamics to Ultimate Objectives .....	240
Figure 9-4	Conceptual Diagram for Active and Latent Dynamics of Three I's Dynamics and Their Relationships to Tempo-spatial Phenomena of Three P's.....	254



## List of Tables

Table 2-1	Typical Suburban Development Processes of “City Region of Second Modernity”.....	53
Table 2-2	Positioning of Tokyo's Suburban Transformation from a Long-term Viewpoint .....	55
Table 3-1	Positioning of Tokyo's Suburban Territory within Wider Context .....	60
Table 3-2	Suburban Municipalities of Tokyo Metropolis .....	65
Table 3-3	International Positioning of National Capital Region .....	66
Table 4-1	Overall Research Process and Constituent Stages .....	79
Table 4-2	Correspondence of Quantitative and Qualitative Approaches to Research Questions .....	80
Table 4-3	Employed Variables from Three P's Analytical Framework: Socio-demographic, Economic, and Political and Administrative (Fiscal) Factors.....	84
Table 5-1	Different Phases of Tokyo's Suburban Transformation: Positioning of '1975 to 1995' and '1995 to 2015' .....	125
Table 6-1	Relative Dynamics between Urban and Suburban Territories during '1975 to 1995' and '1995 to 2015' .....	128
Table 6-2	Eigenvalues, Contribution Ratios and Cumulative Contribution Ratios of PCs for Shrinkage Period of '1995 to 2015' .....	130
Table 6-3	Main Characteristics of Growth and/or Decline Types for Shrinkage Period of '1995 to 2015' .....	136
Table 6-4	Eigenvalues, Contribution Ratios and Cumulative Contribution Ratios of PCs for Growth Period of '1975 to 1995' .....	140
Table 6-5	Main Characteristics of Growth and/or Decline Types for Growth Period of '1975 to 1995' .....	146
Table 6-6	Relative Dynamics between Inner and Outer Suburban Territories during '1975 to 1995' and '1995 to 2015' .....	151
Table 8-1	Characteristics of Tachikawa City, Hachioji City and Ome City from the Perspective of Three I's.....	226
Table 9-1	Tokyo's Suburban Transformation Positioned within Phelps and Wu (2011)'s Framework.....	253
Table 9-2	Active and Latent Dynamics of Suburban Transformation in Tokyo's Case .....	256

## **List of Abbreviations**

BCCs	Business Core Cities
CA	Cluster Analysis
CCI	Chamber of Commerce and Industry
CNDP	Comprehensive National Development Plan
CLAIR	Council of Local Authorities for International Relations
DIDs	Densely Inhabitant Districts
EU	European Union
FAR	Floor Area Ratio
GOJ	Government of Japan
ICCS	Integrated Community Care System
ICTs	Information and Communication Technologies
IPSS	National Institute of Population and Social Security Research
ISM	Institute of Statistical Mathematics
ITMR	The Institute for Tokyo Municipal Research
JETRO	Japan External Trade Organization
J-REITs	Japanese Real Estate Investment Trusts
JPC	Japan Policy Council
JR East	East Japan Railway Company
LDP	Liberal Democratic Party of Japan
METI	Ministry of Economy, Trade and Industry
MEXT	Ministry of Education, Culture, Sports, Science and Technology
MHLW	Ministry of Health, Labour and Welfare
MIAC	Ministry of Internal Affairs and Communications
MICE	Meetings, Incentives, Conferences and Exhibitions
MIE	Metropolitan Inter-city Expressway
MLIT	Ministry of Land, Infrastructure, Transport and Tourism
NCRDP	National Capital Region Development Plan
NICs	Newly Industrialised Countries
NIMBY	Not In My Back Yard
NPOs	Non Profit Organisations
PCA	Principal Component Analysis
R&D	Research and Development
SMEs	Small and Medium Enterprises
TAMA	Technology Advanced Metropolitan Area
TLOs	Technology Licensing Organisations
TMG	Tokyo Metropolitan Government
TNT	Tama New Town

UCA	Urbanisation Control Area
UK	United Kingdom
UPA	Urbanisation Promotion Area
UR	Urban Renaissance Agency
US	United States
WWII	World War II
YIMBY	Yes In My Back Yard

# Chapter 1

## Introduction

### 1.1 Overview of the Thesis

#### 1.1.1 Emergence of New Path-dependent, Multifaceted Suburban Restructuring of Tokyo Metropolis

Over recent decades, the suburban territory of Tokyo Metropolis, as the major prefecture of the Greater Tokyo Area, has experienced new path-dependent, multifaceted restructuring in the context of stagnation and/or decline. Tokyo's suburban territory is officially called the Tama Area, consisting of thirty (30) suburban municipalities classified into twenty-six (26) cities, three (3) towns and one (1) village under the Local Autonomy Act of 1947. By contrast, Tokyo's urban territory is officially called the Special Ward Area constituting twenty-three (23) special wards. Tokyo's suburban territory is a predominant feature of Tokyo Metropolis, accommodating a large population of about 4.2 million within a vast area of about 1.2 thousand square kilometres as of 2016. Under a strong back-to-the-city movement of workplace and residence taking place primarily since the early 2000s, it has experienced radical restructuring, especially within the outer suburban territory. This restructuring has incorporated the different trajectories of suburban municipalities, which substantially depend on their geographical locations and past development paths. Some suburban municipalities have already shown symptoms of economic and/or socio-demographic decline. Even growing suburban municipalities would be destined to face shrinkage in the future, unless efficient and effective countermeasures would be taken in a timely manner. Therefore, it is an urgent issue to tackle this suburban shrinkage. In this vein, these altered suburban fortunes represent an important, but barely elaborated, analytical, policy and planning agenda taken up in this thesis. This is the agenda that has implications not only for Tokyo's suburban territory, but also for entire Tokyo Metropolis. Exploring this agenda, it is essential to clarify how urban policies should be formulated and implemented to achieve future suburban sustainability and regeneration in Tokyo Metropolis.

From a wider perspective, the National Capital Region, which is the largest urban agglomeration in the world with a population of approximately 37.8 million as of 2016, has been one key site in the process of globalisation. Therefore, an international positioning of Tokyo Metropolis needs to be kept in mind for an understanding of Tokyo's suburban restructuring. Over recent decades, the progress of globalisation underpinned by an ideology of neo-liberalism has increasingly intensified interconnectedness and interdependencies at various scales of transnational, national and sub-national levels (e.g. Kantor et al., 2012), accelerating cross-border flows of people, goods, services and information. Within the newly emerged urban hierarchy of an increasingly

globalised world, Tokyo, New York, London and Paris have been positioned as the most superordinate metropolises, being often entitled as “world cities” (Friedmann, 1986; Friedmann and Wolff, 1982; Hall, 1966; Knox, 1995, 2002) or “global cities” (Sassen, 2001) with strong political, economic, social and cultural influences on international affairs. Now, these metropolises have been “undergoing the deepest structural change - economic, social and physical - followed by urban entities with less pivotal functions, which, by gaining new economic status, are emerging as regional nodes” (Aveline-Dubach, 2014a: 28).

In this context, Tokyo Metropolis has experienced radical economic and socio-demographic transformations. On the economic side, it has undergone industrial advancement accompanied with growing knowledge-intensive, high-tech service industries, as well as deindustrialisation coupled with the hollowing-out of manufacturing industries. Alongside the continued agglomeration of command-and-control functions within Tokyo’s urban territory, the suburban territory has suffered the overseas transfers of labour-intensive production plants, especially into Newly Industrialised Countries (NICs), under the transnational restructuring of production systems for flexible specialisation and spatial divisions of labour. This economic restructuring has resulted in accelerating job polarisation and widening income disparities within Tokyo Metropolis. On the socio-demographic side, Tokyo Metropolis has faced more rapid population aging and decline than other large metropolises in advanced nations (Mallach, Hasse and Hattori, 2017; Rodwin, Gusmano and Butler, 2006), mainly due to increased life expectancy and diminished fertility rates. This socio-demographic shrinkage has more seriously damaged Tokyo’s suburban territory rather than the urban territory.

On the political and administrative side, the Government of Japan (GOJ) and Tokyo Metropolitan Government (TMG) have begun to stress the metropolitan city centre mainly since the early 2000s under a global competitiveness agenda, aiming to escape from economic stagnation after the collapse of the bubble economy in the early 1990s. Under their increasingly worsened fiscal conditions, they have attempted to accelerate private-sector investment-led urban renewal, without much public investment, through a series of deregulations aimed at improving market liquidity (Hatta, 2006). Consequently, private-sector investment has more intensively concentrated on Tokyo’s urban territory with greater development potential, compared with the suburban territory. In fact, according to Aveline-Dubach (2014b)’s work, Tokyo’s suburban territory has attracted less property investment. To take a retrospective glance, mainly since the middle 1980s, upper-level governmental entities have attempted to form a polycentric metropolitan structure with suburban employment centres, called the Business Core Cities (BCCs), aiming to achieve ‘suburban self-containment’ (e.g. Eto, 1995; Ikeda, 1999; Ishida, 1992; Miyake, 2005a; Oki, 2011; H. Sato, 2010, 2016; Sorenson, 2001b; Takahashi, 1998; Togo, 1993). However, the prioritised strengthening of the metropolitan city centre implicitly indicates the retreat of upper-level governmental entities from metropolitan-wide polycentricity. This retreat has served to accelerate the out-migration of global enterprises from Tokyo’s suburban territory.

Consequently, municipal governments, local Small and Medium Enterprises (SMEs) and local communities have been left to tackle suburban shrinkage on their own. In this way, the continued political and policy shift towards the metropolitan city centre, which has served to strengthen its magnetic powers, has accelerated the back-to-the-city movement and exacerbated suburban shrinkage. Consequently, an urban-suburban divide in political and administrative, economic and socio-demographic terms has been increasingly widened, especially since the 2000s.

Considering these, recent Tokyo's suburban restructuring has taken place in the context of synchronised, or all-at-once, changes of all the economic, socio-demographic and political and administrative processes created by the interplay of international and domestic forces, namely: 1) economic stagnation and long-lasting deflation, industrial advancement with growing high-order service industries, deindustrialisation and the transnational restructuring of production systems, 2) population decline with diminished fertility rates and rapid population aging with increased life expectancy, and 3) the necessity of strengthening global competitiveness, tightened policy constraints under accumulated fiscal debts and amplified social welfare expenditures, and decentralisation processes under increasingly emphasised democratic planning. This coincidence of economic, socio-demographic and political and administrative processes has created a complexity of recent Tokyo's suburban restructuring. Given this, Tokyo's suburban restructuring is a path-dependent, multifaceted process that would require thoughtful policy and planning interventions.

### **1.1.2 Tokyo's Suburban Restructuring Worthy of Research for Contemporary Suburban Debates**

Overall, analytical, policy and planning issues associated with suburban spaces have been less examined, compared with urban spaces including city centres (e.g. Keil, 2013; Lang, Blackely and Gough, 2007; Phelps, 2010). Alongside the emergence of post-fordist polycentric metropolises shifted from fordist monocentric metropolises (e.g. Dear, 2003; Dear and Dahmann, 2008; Gottdiener, 1985; Gottdiener and Kephart, 1991; Hall and Pain, 2006; Soja, 2011a), suburban spaces have increasingly become predominant in both quantitative and qualitative terms (Phelps, 2010). Nowadays, it is no exaggeration to say that the major issues of contemporary urbanisation worldwide are strongly associated with suburban transformations (McGee, 2013). Suburban spaces have been functionally diversified to become similar to urban spaces (De Jong, 2013). Therefore, many issues and problems observed in cities have been relevant to suburbs (Orfield, 2002). Consequently, "the binary opposition of cities and suburbs seems less important" (Harris and Lewis, 1998: 636); thus, terms like "cities" and "suburbs" become "zombie categories" (Lang and Knox, 2009: 790). Accordingly, various suburban transformations in different national settings and/or at different phases of urbanisation have increasingly attracted academic attentions among urban scholars and commentators (e.g. De Jong, 2013; Keil, 2013; Mace, 2013; Modarres and Kirby, 2010; Phelps, 2010, 2015, 2017;

Phelps and Wu, 2011; Wu and Phelps, 2008, 2011b). In this vein, various lexicons, such as “edge cities” (Garreau, 1991), “edgeless cities” (Lang, 2003), “technoburbs” (Fishman, 1987), and “exopolis” (Soja, 1996), have emerged to represent new suburban transformations. Thus, the term ‘post-suburban’ has emerged to speak to these suburban transformations that “signal the rise of something different from the traditional suburb” (Phelps and Wood, 2011: 2591). However, a post-suburban world has not yet been deeply understood, especially in terms of suburban politics and governance (Ekers, Hamel and Keil, 2015; Phelps, 2015; Young, 2015). Simultaneously, there is an increasing need to make overarching debates on various suburban transformations from an international comparative perspective (Phelps and Wu, 2011); in this situation, Phelps and Wu (2011) proposes a conceptual and theoretical framework to address typical suburban development processes worldwide. Given these, now is the time to seriously explore various suburban phenomena in a post-suburban world (e.g. Forsyth, 2012; Keil, 2013; Lang, Blackely and Gough, 2007; Phelps and Wood, 2011; Phelps, Wood and Valler, 2010; Phelps and Wu, 2011; Vicino, 2008).

In this vein, recent Tokyo’s suburban restructuring could be considered an important global frontier for analytical, policy and planning research on outer suburban shrinkage. The decline of outer suburban cities has become apparent in Tokyo Metropolis, after the relative dynamics between Tokyo’s inner and outer suburban territories have turned inside out within the contextual transition from growth to shrinkage. Whilst inner suburban shrinkage has gradually been paid attention (e.g. Audirac et al., 2012; Couch et al., 2004; Fol, 2012; Hanlon, 2008; Lucy and Philips, 2000; Randolph and Freestone, 2011; Vicino, 2008; Vicino, Hanlon and Short, 2007; Wiechmann and Pallagst, 2012), the shrinking processes of outer suburban spaces, especially those within polycentric spatial structures of large metropolises, have so far been less examined. This is partly because other large metropolises, such as New York, London and Paris, continue to grow. From a domestic viewpoint, shrinking cities have yet been less examined, especially for metropolitan areas (Hattori, Kaido and Matsuyuki, 2017; Mallach, Haase and Hattori, 2017; Martinez-Fernandez et al., 2016). In this situation, Buhnik (2014, 2017) examines the shrinking processes of the Osaka-Kyoto-Kobe city-region that is the second largest urban agglomeration in Japan. However, as for Tokyo Metropolis, its suburban shrinkage has been less explored even after the Institute for Tokyo Municipal Research (ITMR) (2011) alarms the foreseen shrinkage of Tokyo’s suburban territory. It is because Tokyo Metropolis has still been growing even at a slow pace, whilst being predicted to start population decline after the peak year of 2020 (TMG, 2017). Especially, underlying political and policy dynamics have been less examined for Tokyo’s outer suburban shrinkage, whilst some urban scholars and commentators have gradually paid attention to the economic, socio-demographic and/or fiscal decline of the Greater Tokyo Area (e.g. Iijima, 2016; ITMR, 2011; Koizumi, 2010; Kubo, 2015; Miura, 2011, 2012, 2017; Song and Deguchi, 2013; Yamaoka and Goto, 2011; T. Yoshida, 2010).

In the future, other large metropolises in advanced nations and rapidly growing large cities in the Asian region might encounter similar symptoms of outer suburban shrinkage. Therefore, it is significant to examine recent Tokyo's suburban restructuring as "a subject worthy of study for which it may tell us about potentially significant transformations in societal values and processes of urbanization" (Phelps, 2012a: 692). Thus, this research would make significant contributions to the discipline of urban studies and planning in both theoretical and empirical terms, given that "there is a pressing need to consider seriously important elements of commonality alongside difference in international experiences of suburbanization" (Phelps and Wu, 2011: 11).

In this vein, this research addresses the following research questions:

- 1) What transformations have existed in recent Tokyo's suburban restructuring?
- 2) How have urban policies under the three-tier governmental system of Japan influenced recent Tokyo's suburban restructuring?
- 3) What policy and planning implications can be drawn for Tokyo Metropolis and other large metropolises? What conceptual and theoretical contributions can be made to contemporary suburban debates on the basis of Tokyo's case?

Tokyo's suburban restructuring is a tempo-spatial phenomenon that is a product of the interactions among the following three interrelated dimensions, namely A) urban policies (political and administrative - fiscal) (Policies), B) economic restructuring (Production), and C) socio-demographic transformation (Population), which are referred to as the 'three P's' of the analytical framework in this research. Therefore, this research analyses how the interactions among these three P's have shaped Tokyo's suburban transformation. From the viewpoint of international political economy, Japan is regarded as a developmental state (Johnson, 1982, 1995; Saito, 2012). Therefore, urban policies play a key role in shaping Tokyo's suburban restructuring. In this respect, this research addresses the following three policy domains: a) urban and infrastructure (re)development, b) industrial and commercial promotion, and c) social welfare improvement, all of which have been important for suburban planning and development. Recently, a necessity of balancing among these three urban policies has been increasingly recognised under magnified fiscal limitations at all levels of government. Thus, these three urban policies have been formulated and implemented with specific inter-governmental and inter-sectoral dynamics under the three-tier governmental system of national, prefectural and municipal levels. In this vein, this research places emphasis on an investigation into the underlying political and policy dynamics of recent Tokyo's suburban restructuring as a tempo-spatial manifestation of the interactions within the three P's.

From the perspective of research methodologies, this research employs a two-stage analysis at different spatial scales consisting of metropolitan and local levels, namely: 1) for the metropolitan scale, entire Tokyo's suburban territory within the metropolitan context (including urban-suburban relationships), and 2) for the local scale, three case studies of Tachikawa City,



Hachioji City and Ome City as key outer suburban cities with different trajectories. In this two-stage analysis, this research employs both quantitative and qualitative approaches in an integrated manner by taking consideration into the concept of “critical realism” (Sayer, 1992, 2000). As for an overall research process, firstly, this research examines the different transformations of all suburban municipalities from both short- and long-term perspectives by exploring the interactions within the three P’s in a quantitative way. Secondly, this research more closely investigates the influences of the three urban policies on recent Tokyo’s suburban restructuring in a qualitative way mainly through interviews, paying attention to underlying political and policy dynamics. Finally, reflecting key findings at metropolitan and local scales through quantitative and qualitative approaches, this research addresses key policy and planning implications for the suburban sustainability and regeneration of Tokyo Metropolis, and explore applications of lessons learnt from Tokyo’s case to other large metropolises, especially those in the Asia region. Then, it makes conceptual and theoretical contributions to contemporary suburban debates on the basis of Tokyo’s case.

In this research process, the quantitative approach is conducted by analysing relevant statistical data through the multivariate analyses of Principal Component Analysis (PCA) and Cluster Analysis (CA). The qualitative approach is conducted by interpreting information obtained through interviews with key informants and scrutinising relevant policy and planning documents. Forty-five (45) in-depth formal interviews consisting of seventy-eight (78) persons were conducted, including academics, current and former public officials of TMG and municipal governments, private practitioners, and representatives of Non Profit Organisations (NPOs) and local community groups.

From the viewpoint of the time framework, this research targets a time period during ‘1975 to 2015’ with a divide into two sequential, but differentiated, time periods of ‘1975 to 1995’ and ‘1995 to 2015’. The period of ‘1975 to 1995’, namely the pre-bubble period, is positioned in the context of stable growth after the first oil shock of 1973, and the period of ‘1995 to 2015’, namely the post-bubble period, is in the context of stagnation and/or decline under the back-to-the-city movement. From an evolutionary perspective, Tokyo’s suburban territory has a relatively long history, compared with those of large cities worldwide. It had undergone the integration of pre-existing agricultural villages into expanded urbanised areas, as captured by the “Desakota Model” (McGee, 1991). Through long-term urbanisation processes, Tokyo’s suburban territory has experienced different modes of convergence and divergence by ever-changing interplays of centrifugal and centripetal forces at different stages of urbanisation, as captured by Dick and Rimmer (1998)’s work. Thus, the phenomena of suburban shrinkage during ‘1995 to 2015’ have been substantially influenced by those of suburban growth during ‘1975 to 1995’. Therefore, while this research puts a primary focus on the period during ‘1995 to 2015’, this research entails an evolutionary perspective with “a sensitivity to the historicity and spatiality of restructuring” (Tomaney, 1994:183) for a deeper understanding of Tokyo’s suburban restructuring.

### 1.1.3 Towards Policy and Planning Implications for Suburban Sustainability and Regeneration

In recent decades, a new planning regime has emerged across Tokyo Metropolis through a paradigm shift in political and policy dynamics within the contextual transition from growth to shrinkage. In this regime, different tiers of government, private enterprises and local communities have re-configured their scopes and perspectives depending on their rationalities and strategies, while responding to the new conditions of shrinkage. Thus, these different actors have brought out multi-layered locational restructuring at both metropolitan and local scales, depending on their different causal relationships and mobile capabilities. Therefore, recent Tokyo's suburban restructuring captured by the three P's has incorporated this multi-layered locational restructuring. Through this restructuring, Tokyo's suburban territory has been increasingly isolated in political and administrative, economic and socio-demographic terms of the three P's. Exploring underlying mechanisms, it is revealed that this multi-dimensional suburban isolation has been created by the following three metropolitan-wide dynamics, namely: A') Inter-governmental dynamics, B') Inter-sector dynamics and C') Inter-actor dynamics, which are referred to as the 'three I's' of the anatomical framework. Here, inter-governmental dynamics have the following two dimensions: a vertical dimension of government among different tiers of government and a horizontal dimension of government among municipal governments. Inter-sectoral dynamics represent an intra-governmental dimension among different policy domains. Inter-actor dynamics indicate private- and community-sector actions in response to public-sector actions; in this research, private- and community-sector entities are divided into economic actors of global enterprises and local SMEs and non-economic (or social) actors of newcomer and traditional communities. In short, the multi-dimensional suburban restructuring of the three P's can be anatomised as the multi-dynamic suburban restructuring of the three I's.

From a metropolitan perspective, GOJ, TMG and global economic actors, which are greater mobile actors, have recently retreated from Tokyo's suburban territory, diverging into different destinations of interests and concerns. Consequently, Tokyo's suburban territory has increasingly become ambiguous within a wider context, resulting in an increased difficulty for coordination and cooperation among different actors especially in the policy domain of industrial and commercial promotion. In this situation, municipal governments have faced increasingly localised political and policy agendas under the uprising of a social welfare regime, and increasingly narrowed their perspectives and scopes to tackle local issues and problems concerned with population aging and/or infrastructure deterioration. Alongside increasingly magnified social welfare- and infrastructure-related burdens, municipal governments have been forced to possess more defensive thoughts and actions for industrial and commercial promotion. Consequently, Tokyo's suburban territory has been degenerating from 'post-suburban' spaces of diverse activities into balkanised spaces that have increasingly become less diverse. Especially on the economic side, the suburban economy has been increasingly localised with a narrowing of its trading places (Bogart, 2006) through weakening linkages to external territories including

global economic circuits.

This research refers to these complex, interactive processes as 'suburban balkanisation', which means that the multi-dimensional suburban isolation in terms of the three P's has been generated by the metropolitan-wide dynamics of the three I's. This notion of 'suburban balkanisation' does not simply mean the multi-dimensional urban-suburban divide. It stresses narrowing processes in terms of the three P's, even including a narrowing of minds, thoughts and actions of municipal governments in policy making and implementation. Importantly, this notion emphasises a risk of the weakening of global and local connectivity. Even this notion includes the detachment of Tokyo's suburban territory from neighbouring provincial areas with the increased extent of 'self-containment', not only from the urban territory.

More closely from a local perspective, Tokyo's outer suburban municipalities have been diverging from the perspective of the three P's within the contextual transition from growth to shrinkage. Under 'suburban balkanisation', their multi-dimensional differentiations have been accelerated not only by metropolitan-wide, higher mobile actors-driven restructuring, but also by local-wide, lower mobile actors-driven restructuring. Within this outer suburban divergence, Tachikawa City, Hachioji City, and Ome City have experienced different trajectories of the three P's, which are respectively characterised by 'growth', 'stagnation' and 'decline' in simple terms. Exploring underlying mechanisms, it is revealed that their different trajectories of the three P's have been generated by local differentiations of the metropolitan-wide three I's dynamics; consequently, these three cities have incorporated different inter-governmental, inter-sectoral and inter-actor dynamics. Moreover, on the basis of the investigation into these three cities, it is revealed that an emergence of proactiveness for industrial and commercial promotion needs to be waited until economic shrinkage would be seriously recognised, under the situation that all these three cities have suffered social welfare- and infrastructure-related burdens even in different ways. Besides, different thoughts and actions among these three cities have emerged in the policy domain of industrial and commercial promotion as follows: 'openness' for Tachikawa City, 'inwardness (or independence)' for Hachioji City and 'outwardness' for Ome City. In this situation, multi-dimensional differentiations among these three cities have led to widening the differentiation of their policy and planning agendas and priorities, partly resulting in an increased difficulty of inter-municipal collaboration only by municipal governments. This difficulty has been magnified by newly emerged obstacles under suburban shrinkage. Although new movements for inter-municipal collaboration have emerged under suburban shrinkage, they have tended to be limited mainly within the policy domain of social welfare improvement. It is partly because municipal governments closest to local communities have tended to stress this policy domain. Besides, the emergence of different thoughts and actions in the policy domain of industrial and commercial promotion would possibly hinder inter-municipal collaboration in this policy domain.

Under these circumstances, Tokyo's suburban territory has now fallen into a vicious spiral of suburban shrinkage, which cannot be escaped by the isolated efforts of each suburban municipality. Tokyo's suburban territory under 'suburban balkanisation' cannot be sustainable due to fewer possibilities of gaining earnings from external spaces. Continuous decreases in population and income, production and employment, and land and property values would result in the degradation of municipal-level public affairs through the diminishment of municipal tax revenues, and vice versa. To cope with the current rapidity of suburban shrinkage, it would be insufficient to improve only local market liquidity through the revitalisation of local commercial activities and/or social welfare industries. Therefore, to prevent further 'suburban balkanisation' and minimise outer suburban divergence, integrated suburban economic development in the form of ensuring economic connections within wider spatial spheres is crucial. Nevertheless, from an overall historical perspective, Tokyo's suburban territory had, or has, continued to be something of a blank space for public intervention by all tiers of government in the policy domain of industrial and commercial promotion, compared with the other two policy domains. This is applied especially to collaboration with global economic actors. This inactivity for industrial and commercial promotion is partly evidenced by less public spending of municipal governments for industrial and commercial promotion and the insufficient scope of inter-municipal collaboration that is limited mainly in the policy domain of social welfare improvement. This is partly because Tokyo's suburban territory during suburban growth had, without much public intervention, attracted various industries as a result of their spontaneous out-migrations from the urban space under the urban-suburban dynamics of metropolitan growth and expansion. Now, the period in which urban and infrastructure (re)development inevitably brings together economic and social prosperity seems to be already over in the matured suburban space. Therefore, it is essential to shift more political and policy emphasis towards the policy domain of industrial and commercial promotion to create an upward spiral from industrial and commercial promotion to social welfare improvement.

Several projects for industrial and commercial promotion, including an industrial cluster project led by the TAMA Association that has made significant contributions to suburban economic revitalisation (Kodama, 2002, 2003, 2010a, 2010b; Okazaki, 2010; M. Sato, 2013), have been undertaken. However, institutional fragmentation in the policy domain of industrial and commercial promotion is the order of the day, in which collaborations among different tiers of government, private- and community-sector entities are insufficient to bring together fruitful outcomes. Especially, a failure to utilise urban capital and/or resources for industrial and commercial promotion is critical. Now, for future suburban sustainability and regeneration, it is essential to pursue more efficient and effective modes of suburban economic development, in which different actors can more proactively and cooperatively engage in industrial and commercial promotion.

In this vein, challenging a planning and development concept of 'suburban self-containment' pursued under polycentric formation, this research proposes a new policy and planning approach of integrated urban-suburban economic development that ensures multi-dimensional urban-suburban linkages of political and administrative, economic and socio-demographic spheres. This is based on the recognition that Tokyo's suburban territory needs to "be positioned within wider metropolitan urban systems" (Phelps, 2015: 8) in the policy domain of industrial and commercial promotion. This approach, which is "context-dependent" (Pike, Rodríguez-Pose and Tomaney, 2016: 4) in terms of making the most use of the political and geographical positioning of Tokyo's suburban territory, emphasises the importance of multi-dimensional urban-suburban linkages for the utilisation of urban capital and/or resources for suburban economic development. Thus, this approach aims to achieve the following ultimate objectives: 1) strengthening of economic institutional systems: re-forming public administrative systems for strengthening of multi-dimensional urban-suburban linkages, 2) strengthening of global connectivity: re-creating wider linkages with external territories including global economic circuits, 3) strengthening of local connectivity: re-building local capacities for better exploitation of local economic development potential.

To carry out this approach, this research suggests the necessity to create new modes of the three I's. Here, the three I's anatomical framework can be utilised as the three I's policy-making framework in the form of reconfiguring desirable and/or undesirable dynamics of the three I's into these new modes. Through this approach, Tokyo's suburban territory would be re-positioned within the vertical and horizontal integrations of economic space under inter-governmental (vertical/ horizontal) and intra-governmental integrations. Besides, this approach would create new suburban platforms for integrated and balanced cooperation and coordination of different actors, which would be buttressed by new forms of suburban governance. In the end, Tokyo's suburban territory would be revived as a place of "importance to the national state" (Phelps, 2010: 73), which would ensure adaptability, flexibility and resilience for new suburban challenges under foreseen metropolitan-wide shrinkage.

Then, reflecting successes and failures observed in the suburban growth and shrinkage of Tokyo Metropolis, this research proposes possible policy and planning implications for other large metropolises worldwide, especially for rapidly growing cities in the Asia region, by addressing policy and planning approaches that should be taken especially during suburban growth to ensure preparedness or resilience to suburban shrinkage.

Finally, this research argues conceptual and theoretical contributions of Tokyo's case to contemporary suburban debates. Referring to typical suburban development processes of Phelps and Wu (2011)'s framework, this research re-frames Tokyo's suburban transformation as one of typical suburban development processes that can be observed under suburban shrinkage. Thus, reflecting the failure of Tokyo Metropolis to establish suburban economic systems required

to tackle suburban shrinkage, this research suggests that latent dynamics formed during suburban growth, which would continue to be obscured under the success of suburban growth, would emerge as undesirable active dynamics under suburban shrinkage. Thus, considering that “any reworking of suburban space will be a political process in which all will need to be involved” (Phelps, 2015: 14), this research concludes that evolutionary perspective-based investigations into underlying mechanisms, including active and latent dynamics, should be made for typical suburban development processes worldwide to obtain significant policy and planning implications about re-workings in post-suburban spaces.

## **1.2 Structure of the Thesis**

The structure of this thesis is as follows. Following this chapter, Chapter 2 contextualises Tokyo’s suburban restructuring in international and domestic debates through a literature review. It explores spatial transformation processes from fordist monocentric structures to post-fordist polycentric structures with attention to the ever-changing roles and functions of suburban spaces within the wider context. Thus, the specificities of Tokyo’s suburban transformation are identified by investigating various types of suburbanisation and post-suburbanisation worldwide. Through these, the importance of exploring underlying political and policy dynamics in Tokyo’s suburban restructuring is clarified by linking the recent research agenda of suburban politics and governance with Phelps and Wu (2011)’s framework.

Chapter 3 clarifies the significance of research and research questions by explaining the international and domestic positioning of Tokyo’s suburban territory. In this, the research questions are detailed by being broken down into sub-questions to provide more concrete viewpoints. Thus, the significance of this research is explained from the following three features, namely: I) as for a tempo-spatial feature: declining outer suburban cities within Tokyo’s polycentric structure, II) as for a multifaced feature: the interactions of urban policies with economic and socio-demographic transformations with attention to underlying political and policy dynamics, and III) as for a path-dependent feature: the evolutionary influences of a paradigm shift within the contextual transition from growth to shrinkage.

Chapter 4 explains the research methodologies used to address the research questions. This research employs the two-stage analysis at metropolitan and local levels, to each of which both quantitative and qualitative approaches are applied. Therefore, it is explained how an integrated way of quantitative and qualitative approaches at different two scales is applied to answer the research questions and then to arrive at significant suburban policy and planning implications. Simultaneously, overall explanations are provided about the multivariate analyses of PCA and CA for the quantitative approach and interviews for the qualitative approach.

Chapter 5 provides a chronological overview of key policy developments associated with Tokyo's suburban transformation. It firstly explains the history of Tokyo's suburban territory before the Second World War (WWII), which has still influenced current suburban affairs. Then, it reviews a series of urban policies after the WWII, which have been formulated and implemented, or unimplemented, to tackle ever-changing issues and problems at different stages of urbanisation. Especially, the policies of spatial planning and development, urban and infrastructure (re)development, industrial and commercial promotion, and social welfare improvement are targeted. Through these, a positioning of the time periods of '1975 to 1995' and '1995 to 2015' within Tokyo's long-term urbanisation process is clarified.

Chapter 6 analyses Tokyo's suburban transformation from the perspective of the three P's analytical framework through the quantitative approach. After looking at urban-suburban dynamics, the multivariate analyses of PCA and CA are applied to analyse all suburban municipalities during the time periods of '1975 to 1995' and '1995 to 2015', using representative variables employed from each of the three P's. This analysis reveals the following three aspects. Firstly, Tokyo's outer suburban territory has been increasingly impoverished over recent decades, whilst the inner suburban territory has been increasingly enriched. Secondly, there has emerged a new mode of suburban transformation under suburban shrinkage, which is more complex from that under suburban growth. Thirdly, outer suburban municipalities have been diverging within the contextual transition from growth to shrinkage, whilst inner suburban municipalities have been converging. Then, looking at the different trajectories of outer suburban municipalities, the reason why Tachikawa City, Hachioji City and Ome City are chosen as case studies is clarified.

Chapter 7 discusses recent Tokyo's suburban restructuring from a metropolitan perspective through the qualitative approach, exploring underlying political and policy dynamics. It is revealed that this multi-dimensional suburban isolation in terms of the three P's has been materialised by the specific metropolitan-wide dynamics of the three I's; this process is referred as to 'suburban balkanisation'. In this process, Tokyo's suburban territory can be perceived as being on the way of degeneration from 'post-suburban' suburbs of diverse activities into balkanised suburbs that have increasingly become less diverse. Especially on the economic side, Tokyo's suburban economy has been increasingly localised with weakened linkages to external territories including global economic circuits. Considering these, it is argued that now is the time to establish new modes of suburban economic development with multi-dimensional urban-suburban linkages under vertical inter-governmental integration (among different tiers of government) and intra-governmental integration (among different policy domains).

Chapter 8 discusses the different trajectories of Tachikawa City, Hachioji City and Ome City from a local perspective through the qualitative approach, exploring the causal relationships of multi-dimensional outer suburban divergence. It is revealed that their different trajectories of the three P's have been created by local differentiations of the metropolitan-wide three I's dynamics.

Thus, the multi-dimensional differentiations of these three cities have increasingly widened differentiations of their current policy and planning agendas and priorities. Consequently, inter-municipal collaboration only by municipal governments has been increasingly difficult under suburban shrinkage, especially in the policy domain of industrial and commercial promotion. Considering these, it is argued that now is the time to create new modes of inter-municipal collaboration for suburban economic development by ensuring horizontal inter-governmental integration (among municipal governments).

Chapter 9 presents final conclusions through an integrated review on quantitative and qualitative approaches-based findings at both metropolitan and local levels. It draws key policy and planning implications for the future suburban sustainability and regeneration of Tokyo Metropolis. By challenging the concept of 'suburban self-containment', it proposes a new policy and planning approach of integrated urban-suburban economic development that ensures multi-dimensional urban-suburban linkages. For this approach, it proposes new modes of the three I's, shifting from the three I's anatomical framework to the three I's policy-making framework. Then, reflecting the successes and failures observed in Tokyo's case, it addresses applications of these lessons to other large cities worldwide. Finally, it discusses the conceptual and theoretical contributions of Tokyo's case by incorporating Tokyo's suburban transformation into Phelps and Wu (2011)'s framework. Thus, it is concluded that evolutionary perspective-based investigations into active and latent dynamics within typical suburban transformations worldwide should be made to create new horizons of contemporary suburban debates.



## **Chapter 2**

# **Contextualising Suburban Restructuring of Tokyo Metropolis in International and Domestic Debates**

### **2.1 Chapter Introduction**

This chapter contextualises Tokyo's suburban restructuring within the contemporary suburban debates of both international and domestic arenas. For this purpose, this literature review considers the following subjects: 1) the emergence of command-and-control large metropolises in an increasingly globalised world, 2) a shift from fordist monocentric structures to post-fordist polycentric structures, 3) increased academic attentions on suburban spaces, 4) the increased necessity to explore suburban politics and governance, and 5) the recent trend of conceptualisation and theorisation about suburbanisation and post-suburbanisation from an international comparative perspective. This review serves to position Tokyo's suburban restructuring within the international and domestic discourses of a post-suburban world, with attention to its commonalities and differences among various types of suburbanisation and post-suburbanisation. Thus, the importance of exploring underlying political and policy dynamics embedded in Tokyo's suburban restructuring is clarified by linking the recent research agenda of suburban politics and governance with Phelps and Wu (2011)'s framework associated with typical suburban development processes in the post-modern era.

### **2.2 Urban Agglomerations as Command-and-Control Centres of Global Economy**

For an understanding of Tokyo's international positioning, it is necessary to comprehend the emergence of large urban agglomerations serving as command-and-control centres within the newly emerged urban hierarchy of an increasingly globalised world. We are now living in the urban era, in which we have been experiencing unprecedented urbanisation with various dramatic changes in political and administrative, economic, social and cultural dimensions at various scales of global, national and sub-national levels. This trend of urbanisation is expected to continue over future decades, as the United Nations (2014: 2) notes that "[i]n today's increasingly global and interconnected world, over half of the world's population (54 per cent) lives in urban areas...The continuing urbanization and overall growth of the world's population is projected to add 2.5 billion people to the urban population by 2050, with nearly 90 per cent of the increase concentrated in Asia and Africa...the proportion of the world's population living in urban areas is expected to increase, reaching 66 per cent by 2050". Alongside this urbanisation trend,

there have emerged drastic changes in global urban systems.

Over recent decades, globalisation has been increasingly linked with urbanisation. This globalisation has created “more penetrative global circuits of capital that operate in the service, production and consumptions sectors and “transcending networks” that reshape urban systems and urban space both at the global, national and sub-national level” (McGee, 2013: 20). In this globalisation process, the contemporary urbanisation has complicatedly incorporated the coexistence of differentiated urbanisation processes between the “Global North” and “Global South”, owing to increasingly intensified transnational interlinkages (McGee, 2013). The Global South has begun to face rapid urbanisation since the late 20th century, whilst the Global North has already experienced urbanisation after the industrial revolution during the middle 18th century to the early 19th century. These interactive, but differentiated, urbanisation processes between the Global North and Global South have been materialised by the deindustrialisation of developed countries under the spatial division of production and labour, advances in Information and Communication Technologies (ICTs), and growing mobilities with weakened international barriers. Thus, this urbanisation trend has been steadily accelerated by globalisation in the form of being “buttressed by a neoliberal ideology that privileges the market system and seeks to deregulate the international and national regulatory environments” (McGee, 2013: 20). Therefore, the contemporary (sub)urbanisation in the Global North, including Tokyo’s suburban transformation, needs to be considered with a view to its relationship to the Global South.

Globalisation has emerged in the late 20th century, as Knox (1995: 3) notes that “[d]uring the 1970s and 1980s there was an important shift from an international to a more global economy”. It has dramatically altered the world geography under the emergence of knowledge economy and restructuring of production systems, creating new networked, hierarchical urban systems in the global arena (e.g. Kantor et al., 2012). Some large urban agglomerations in the Global North, such as Tokyo, London, New York and Paris, have become the most high-order cities of this new urban hierarchy, serving as command-and-control centres of the increasingly interconnected and interdependent urban systems of the world (e.g. Kamo, 2015; Kantor et al., 2012). These metropolises are often entitled “world cities” (Friedmann, 1986; Friedmann and Wolff, 1982; Hall, 1966; Knox, 1995, 2002) or “global cities” (Sassen, 2001), which have been making strong political, economic, social and cultural influences on the international society. In this regard, Friedmann and Wolff (1982: 310-311) suggest that “their determining characteristic is not their size of population. This is more properly regarded as a consequence of their economic and political role...Urban roles in the world system are not permanently fixed. Functions change; the strength of the relationship changes; spatial dominance changes”. Thus, these metropolises have been “undergoing the deepest structural change - economic, social and physical - followed by urban entities with less pivotal functions, which, by gaining new economic status, are emerging as regional nodes” (Aveline-Dubach, 2014a: 28).

There have existed functional differences even among the command-and-control metropolises worldwide. Machimura (1994) points out the following three specific features of Tokyo Metropolis. First, Tokyo Metropolis incrementally accumulated the command-and-control centres of Japanese manufacturing companies with transnational businesses, regardless of overseas transfers of production plants begun mainly since the late 1970s. Second, Tokyo Metropolis became a financial centre of a type of “money supplier” (Kamo, 1993, cited in Machimura, 1994) by export earnings of the manufacturing sector, differently from New York as a financial centre of a type of “money absorber” (Kamo, 1993, cited in Machimura, 1994). Third, Tokyo Metropolis successfully maintained diversified manufacturing industries and possessed the flexibility and adaptability of production systems through sophisticated networks with SMEs and Research and Development (R&D) functions (Machimura, 1994). Therefore, these specificities of Tokyo Metropolis, especially the dominant role of manufacturing industries, need to be kept in mind for an understanding of Tokyo’s suburban transformation. It is because the continued restructuring of production plants and R&D facilities has substantially impacted Tokyo’s suburban territory.

In this situation, Tokyo Metropolis has been changing in response to both international and domestic forces. On the international side, large metropolises in the Global North have become severely exposed to inter-city competition on the global arena. Consequently, this international force has increasingly affected policy making and implementation at all the national, regional and local levels of government in each country. In fact, the recent policy directions of GOJ and TMJ have been increasingly dominated by the global competitiveness agenda (Saito, 2012). Simultaneously, on the domestic side, large metropolises in the Global North have needed to tackle new urban challenges appeared at the matured stage of urbanisation, in a different way from those in the Global South. In this respect, McGee (2013: 19) notes that “responding to the prevailing deindustrialization of urban centers, urban cores will be restructured, with an increase in service employment, slower population growth and an aging population, persistent structural unemployment, and the persistence of casual labor...This situation will be exacerbated by the need to retrofit the infrastructure of nineteenth-century cities”. Under these circumstances, Tokyo Metropolis has continuously been transforming through “[a] complex mix of deindustrialization and reindustrialization as well as decentralization and recentralization” (Soja, 2011b: 684a), bringing together radical suburban restructuring. However, “[c]omparatively the post-bubble period received very little attention. Yet Tokyo is in the grip of changes that are just as radical as those that affected it during the 1980s” (Aveline-Dubach, 2014b: 265).

### **2.3 Metropolitan Spatial Transformation: from Fordist Monocentricity to Post-fordist Polycentricity**

Over recent decades, large metropolises worldwide have transformed their spatial structures through their long-term metropolitan revolutions. Many urban scholars and commentators have claimed that these metropolises have transformed from fordist-type monocentricity to

post-fordist-type polycentricity, suggesting the emergence of a new spatial system (e.g. Gottdiener, 1985; Gottdiener and Kephart, 1991; Hall and Pain, 2006; Soja, 2000, 2011a).

In the early 20th century, Burgess (1925), an urban sociologist of the Chicago School of Urban Ecology, proposed a theoretical pattern of a monocentric city for Chicago in the fordist era. According to Matsumoto (2014), Chicago grew mainly during the middle 19th century to the early 20th century after the industrial revolution taken place in the United Kingdom (UK) in the late 18th century. It dramatically transformed into a big, fordist industrialist city in the form of being buttressed by heavy industrialisation and geographical advantages. Thus, it became a pivotal node of water and land transportations after the coast-to-coast railroad was constructed in the middle 19th century. Chicago reached a population of 2.0 million in the late 19th century by a huge volume of immigrants from the European Continent (Matsumoto, 2014). Through an investigation into Chicago, Burgess (1925) proposed the five successive zones of a monocentric pattern by suggesting that “[t]he typical process of the expansion of the city can be best illustrated, perhaps, by a series of concentric circles...The resulting differentiation of the cosmopolitan American city into areas is typically all from one pattern, with only interesting minor modifications” (Burgess, 1925: 50-54). Whilst Burgess (1925) worked on sociological studies through the setting of these zones, his monocentric model was subsequently accepted as a typical spatial model with a binary opposition of cities and suburbs.

However, polycentric metropolitan structures have emerged in a post-modern world mainly since the 1980s, as Beauregard (2006: 36) notes that “[t]he multiplicity of multifunctional commercial and residential nodes in the suburban periphery was mainly a post-1980s phenomenon, though it had rooted in the 1970s”. Davis (1990)’s book of “City of Quartz” captures this sort of spatial transformation observed in Los Angeles as a post-modern urbanisation process. For this polycentricity, Soja (2011b) suggests that “polycentric network of urban agglomerations” represents a “new phase of multi-scalar regional urbanization”, as follows:

“Even as the metropolitan urbanization process was advancing all around them, the Chicago scholars persisted in theorizing the socio-spatial conditions that characterized the still prevailing nineteenth-century industrial capitalist...yet remain fixed on a singular, universal, and constant model of the metropolis as divided into city and suburb...this metropolitan phase is currently being superseded by a new phase of multi-scalar regional urbanization...I am arguing here, however, that the city region is not just an expression of globalization but represents a more fundamental change in the urbanization process, arising from the regionalization of the modern metropolis and involving a shift from the typically monocentric dualism of dense city and sprawling low-density suburbanization to a polycentric network of urban agglomerations where relatively high densities are found throughout the urbanized region.” (680-684)

In this way, large metropolises with polycentricity can no longer be explained by the classical concept of Burgess (1925)’s monocentric model (Harris and Lewis, 1998). Importantly, regarding the spatial transformation from monocentricity to polycentricity, Dear (2003: 504), an urban scholar of the Los Angeles School of Urbanism, suggests the concept of a “radical break” in the

urbanisation process, which is conceived as “a discontinuity between past and present political, sociocultural and economic trends”. Moreover, Dear and Dahmann (2008) suggest “new emergent urban forms”, as follows:

“The proliferation of neologisms describing emergent urban forms is more indicative of confusion rather than intellectual grasp. Is this “postmodern urbanism” a “splintered urbanism” or “post-suburbanism”? ...Implicit in each approach is the notion of “radical break” that is a fundamental discontinuity between past and present practices.” (267-269)

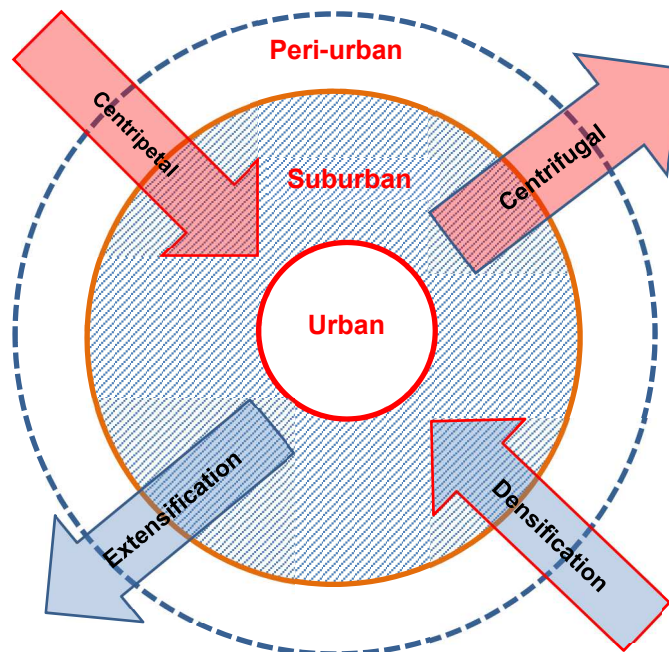
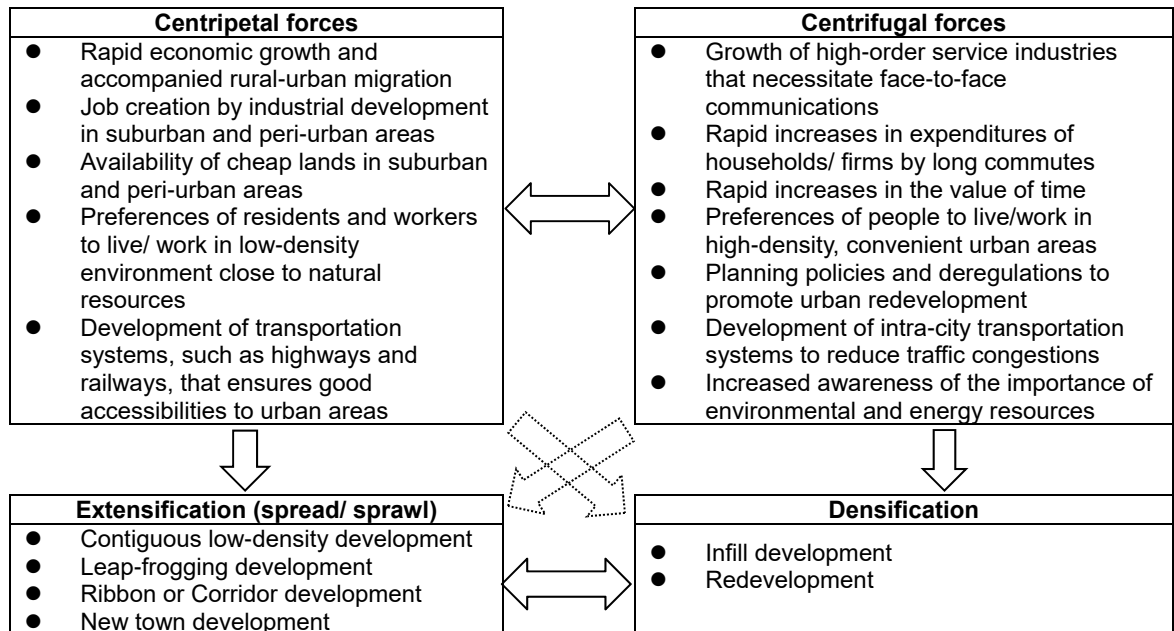
It depends on urban scholars and commentators how to conceptualise this mutation from monocentricity to polycentricity. Yet, from a general viewpoint, this polycentricity has been created mainly for socio-economic benefits (Richardson, 1988), incorporating ever-changing dynamics between centripetal and centrifugal forces. In this regard, Soja (2000: 17) suggests that there is “a complex and dynamic relation between the forces of agglomeration and centralization (centripetal forces) and disagglomeration and decentralization (centrifugal forces), again operating at several different scales, differing in resultant effects from place to place, and changing over time”. These centripetal and centrifugal forces have been created by various factors. In this regard, the World Bank Institute (2012) presents a relevant framework concerned with these forces and their constituent factors, as shown in Figure 2-1. In this framework, these centripetal and centrifugal forces are associated with the spatial transformation modes of extensification (spread/ sprawl) and densification.

Importantly, this spatial transformation from monocentricity to polycentricity has been associated with the industrial shift from Fordist to post-Fordist and progress of globalisation, as Audirac (2014: 45) notes that “[t]hese post-Fordist processes are deeply “glocal” manifestations of a new type of global urbanism, which has restructured the modern metropolis into a polycentric city region”.<sup>1</sup> In this regard, post-fordist polycentric structures have emerged as new urban systems that possess flexibility and adaptability required in the post-fordist era (Soja, 2000, 2011a). Notably, alongside the emergence of post-fordist polycentric metropolises, suburban employment nodes have been integrated into global economic networks, as Muller (1997: 57) suggests that “[t]he world city model, whose city is actually a polycentric metropolis of realms, articulates the role of CBD and its surrounding constellation of suburban downtowns as primary control points in the global economic networks”. In fact, in the United States (US), many corporate headquarters of the Fortune 1000 corporations, as well as their R&D facilities, have been located in suburban spaces (De Jong, 2013). As detailed later, the Greater Tokyo Area has pursued polycentric formation through proactive public interventions of upper-level governmental entities (Eto, 1995; Ikeda, 1999; Ishida, 1992; Miyake, 2005a; Oki, 2011; H. Sato, 2010, 2016; Sorenson, 2001b; Takahashi, 1998; Togo, 1993). Whilst Tokyo’s suburban territory has to a lesser extent accommodated enterprise headquarters compared with other international metropolises (Ichikawa and Kubo, 2012), it has continued to be impacted by the progress of

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<sup>1</sup> Soja (2000: 152) notes that “[t]he postmetropolis can be represented as a product of intensified globalization processes through which the global is becoming localized and the local is becoming globalized at the same time”.

globalisation and industrial shift from fordist to post-Fordist, partly due to the predominance of manufacturing bases. Simultaneously, Tokyo's suburban territory has experienced population aging and decline as one of the crucial issues and problems across the nation. Consequently, Tokyo's suburban territory has increasingly mirrored the interactive dynamics of international and domestic forces.



Source: Adapted from the Materials of the E-learning Course titled 'Sustainable Urban Land Use Planning' by the World Bank Institute (2012)

Figure 2-1 Centripetal and Centrifugal Forces in Metropolitan Transformation

## 2.4 Contemporary Suburban Space as a Subject of Worthy of Research

Various suburban transformations have newly emerged across the world, especially alongside the emergence of post-fordist polycentric metropolises. Nowadays, it is not an exaggeration to claim that contemporary suburban spaces have mirrored the most contemporary facets of post-fordist urbanisation (McGree, 2013). Fishman (1987: 4-5) suggests that “suburbia has always seemed contemporary” by referring to high-class residential suburbs in the US. His comment can be applied even to contemporary suburban spaces. Accordingly, suburban spaces have reflected the process of globalisation, as Keil and Addie (2015: 908) suggest that “changing context and mechanisms of post-suburban suburbanization are vital elements within the overarching processes of global regionalization”.

Suburban spaces of large metropolises have continuously altered their roles and functions within the wider metropolitan context at different phases of urbanisation. Nowadays, these spaces have increasingly come to be predominant within large urban agglomerations in both quantitative and qualitative terms (Phelps, 2010). From a quantitative viewpoint, suburban spaces have possessed a dominant share within each large metropolis, as McGee (2013: 20) notes that “a major component of the population of these mega-urban regions lives outside the city cores often comprising more than two-thirds of the region’s population”. From a qualitative viewpoint, suburban spaces have increasingly played an important role within the wider context, as Phelps (2010) suggests:

“We have by now become quite familiar with the idea of suburbs as places where the majority of the populations of developed nations live. Indeed, this recognition of the quantitative significance of suburbs to our nations has been reflected in repeated critiques of the quality of those same suburbs...Suburbs have come to be regarded as placeless nowhere. Doubtless, this line of critique has been at least partly responsible for obscuring the historic economic significance of suburbia and its rapidly increasing economic significance within wider metropolitan regions.” (68)

Under the increased predominance of suburban spaces in both quantitative and qualitative terms, these spaces have come to serve as “the engine that drives metropolitan and world city growth” (Muller, 1997: 57). Simultaneously, suburban spaces have become similar to urban spaces (e.g. Birch, 1975; De Jong, 2013), which could be “themselves urban, though a new kind of urban” (Teaford, 1997: 5). Thus, they have come to have “mixing of land uses, less predictable geographic form; new politics; new work-residence relations; and discordant mix of land uses” (Wu and Phelps, 2008: 465-467, cited in Keil and Young, 2011: 56), as well as to accommodate diverse actors and stakeholders (Harris, 1999). Consequently, suburban spaces have become “sensitive to questions of spatial organization, economic change, social meaning, culture ideology, social stratification and structure, and political power (Kling, Olin and Poster, 1991: 4).

On the socio-demographic side, suburban spaces, especially in US cities, have come to have a mixture of different races, ethnicities, classes, family structures, political behaviours, and built

environments (Lassiter and Niedt, 2013). On the economic side, suburban spaces have become “the new ‘projection spaces’ of the post-Fordist economy” (Phelps, 2010: 74), and evolved “not just as the product of sterile divisions of labour, but as potentially important sites of innovative activities” (Phelps, 2010: 69), which ensure “suburban creativity” (Phelps, 2012b: 269). In this regard, Phelps et al. (2006a: 378) suggest that “the economic role of edge urban economies within wider city-region and even national economic structures is often more complex than entertained in much of the literature”. Thus, on the political and administrative side, suburban spaces have come to “speak to the rapid succession of potentially rather different models of urban politics—from a “pure” suburban form of Molotch’s (1976) “growth machine” toward different types of urban regime” (Phelps, 2012a: 671). In these ways, suburban spaces, which have become increasingly predominant in both quantitative and qualitative terms, have experienced new transformations in socio-demographic, economic and political and administrative terms.

Consequently, suburban spaces have become quite different from homogenous and harmonious environments indicated by the classical concept of ‘suburbs’. Thus, the term ‘suburbs’ has increasingly become unable to “communicate the complicated range of political and economic actions of, and relationships among, the municipalities that constitute the contemporary metropolitan area” (De Jong, 2013: 9-10). In this regard, Teaford (1997: 1) suggests that “[e]conomically and socially, the periphery was no longer a subordinate dependent of the center and thus no longer a candidate for the prefix sub”. Consequently, the terms of ‘cities’ and ‘suburbs’ have become “Zombie Categories” (Lang and Knox, 2009: 790), under the situation that “the binary opposition of cities and suburbs seems less important” (Harris and Lewis, 1998: 636). Although ‘suburbs’ could be defined against ‘cities’ in the past, contemporary suburban spaces within increasingly complex metropolitan systems have become quite difficult to define. In this respect, Forsyth (2012: 270) suggests that “[e]ven among urban scholars, then, there is no consensus as to what exactly constitutes a suburb...To define suburbs as a whole, rather than types of suburbs, is more complex”. In the end, the contemporary suburban space has become to be “known as a non-place, a nowhere”, which does not offer any common definitions (Modarres and Kirby, 2010: 114). However, contemporary issues and problems of urbanisation have been associated mainly with suburban spaces, as Orfield (2002) suggests:

“U.S. suburbs are not a monolith with one set of common interests. Suburban areas are diverse...Many of the problems so long confined to central cities are present in today’s suburbs...The implied distribution of fiscal stress is highly skewed, and flows of state resources reduce inequality only modestly.” (64)

Under this situation, various suburban transformations in different national settings and/or at different phases of urbanisation have been increasingly recognised as a subject worthy of research (e.g. De Jong, 2013; Imahashi, 2004; Ishikawa, 1999, 2008; ITMR, 2011; Keil, 2013; Kubo, 2015; Mace, 2013; Miura, 1995, 2011, 2012, 2017; Modarres and Kirby, 2010; Phelps, 2010, 2015, 2017; Phelps and Wu, 2011; Wu and Phelps, 2008, 2011b; Wakabayashi, 2007;



Yoneda, 2016). Overall, suburban phenomena have so far been less examined in the discipline of urban studies and planning, compared with urban phenomena (e.g. Phelps, 2010; Keil, 2013; Lang, Blackely and Gough, 2007; Silverstone, 1997). In this vein, now is the time to seriously explore a wide variety of suburban phenomena worldwide (e.g. Forsyth, 2012; Keil, 2013; Lang, Blackely and Gough, 2007; Phelps and Wood, 2011; Phelps, Wood and Valler, 2010; Phelps and Wu, 2011; Vicino, 2008). For instance, Lang, Blackely and Gough (2007: 388) suggest that “it is time to take suburbs seriously, examining them socially, economically, and politically from the ground up”. This is not only for an understanding of suburban spaces, but also for that of whole metropolitan systems, as Soja (2000: 238) suggests that “[t]he urbanization of suburbia and the growth of Outer Cities has generated its own tracks of reconceptualization, not just of the erstwhile suburban milieu but of the modern metropolis as a whole”. Thus, an understanding of various suburban transformations would contribute to academic debates and actual practices in the field of planning and development (Forsyth, 2012). Given these, various suburban transformations are reviewed below from a historical perspective.

## **2.5 Suburban Transformations of Large Metropolises from an Evolutionary Perspective**

### **2.5.1 Suburbanisation and Suburbia**

Looking into the remote past, the term ‘suburbs’ derived from the Latin can be translated as “under the city”, which means “outside the city” (Fassmann, 2013). At the early stage, ‘cities’ and ‘suburbs’ were functionally separated (Harris and Larkham, 1999). At that time, suburban spaces accommodated “too large or too noxious functions...such as cemeteries, farms, tanneries, brick-making yards, and slaughters” (De Jong, 2013: 10), as well as the poor who could not afford to live in cities (Harris and Larkham, 1999). Then, industrial suburbanisation occurred alongside the formation of an industrialist society mainly since the middle 18th century (Walker and Lewis, 2001), often incorporating uncontrolled, illegal suburban developments (Harris, 1999). While Harris (1999: 94-96) identifies the three main types of suburbs in US cities, namely “residential suburbs”, “industrial suburbs”, and “unincorporated suburbs”; the latter two were dominant at the early stage of suburban formation.

Since the middle 19th century, suburban spaces came to be increasingly paid attention as a destination place of high- and middle-class groups, or ‘bourgeoisie’, who escaped from urban spaces (Fishman, 1987; Teaford, 1997). In US cities, the departure of whites, or ‘white flight’, from cities into suburbs occurred coincidentally with the immigration of blacks, especially during the 1940s to the 1970s (Boustian, 2010). Consequently, there emerged “the middle-class suburb of privilege” (Fishman, 1987: 5), in which suburban residents commuted to central cities. In this regard, Teaford (1997: 9) suggests that “[s]uburbia was a haven, a retreat, where one could escape the evils and annoyances of the city and find rest and health nestled among beauties and

the estates of the wealthy". One famous example is the Levittown in New York, which was built during 1947 to 1951. Consequently, alongside the formation of high-class residential areas, new suburban ways of life, or 'suburbia', emerged (Beauregard, 2006; Fishman, 1987). In this regard, Fishman (1987) suggests:

"Suburbia is more than a collection of residential buildings; it expresses values so deeply embedded in bourgeois culture that it might also be called the bourgeois utopia...Suburbia, therefore, represents more than the bourgeois utopia, the triumphant assertion of middle-class values...Derived from the English concept of the picturesque, this tradition distinguishes the suburb both from the city and from the countryside and creates that aesthetic "marriage of town and country" which is mark of the true suburb...suburbia was indeed a cultural creation, a conscious choice based on the economic structure and cultural values of the Anglo-American bourgeoisie." (4-9)

Whilst these high-class residential suburbs were "the icons of the "American Dream"" (Vicino, 2008: 554), their formations were actualised in the form of urban sprawl from the viewpoint of spatial form. Urban sprawl is characterised by "leapfrog or scattered development", "ribbon or strip commercial or other development", and "large expanses of predominantly low-density and single-use development" (Peiser, 2001: 279). This massiveness of residential suburbanisation was unprecedented, as Bruegmann (2008: 15) notes that "sprawl has been a persistent feature in cities since the beginning of urban history. What was new in the twentieth century was that sprawl at last became a mass phenomenon". Consequently, this urban sprawl has generated wider urbanised areas with lower densities in US cities, compared with European cities (Bruegmann, 2008). Whilst urban sprawl can be observed all over the world, European cities are more compact, in which "[s]uburbanization was a more managed process, often associated with the Keynesian welfare state and the development of periphery for public housing" (Wu and Phelps, 2011a: 249). In recent decades, new movements, including the New Urbanism and Smart Growth, have occurred to retrofit, or revitalise, inhumane suburbs created through urban sprawl (e.g. Duany, Plater-Zyberk and Speck, 2000; Dunham-Jones and Williamson, 2009; Forsyth, 2005; Kirby, 2004).

As for the Greater Tokyo Area, massive suburbanisation occurred especially during the late 1950s to the early 1970s. Consequently, Japan has become a suburban nation a quarter of the century behind the US, in which the Greater Tokyo Area has been conceived as being a suburban society since the 1970s (Miura, 1995). At that time, in the similarly way as US cities, suburban residential areas served as the destination places of middle-class families who wished to have their own houses in good living environments (e.g. Wakabayashi, 2007). Thus, the suburban way of life in Tokyo Metropolis was Americanised, especially owing to in-migrated middle-class groups who were keen to US cultures (Chiikisōgōkenkyūjo [Regional research institute]. ed., 1989). Yet, these residential areas were formed through urban sprawl, resulting in vastly expanded urbanised areas (Sorenson, 2001a, 2001b, 2011). However, Tokyo's suburbanisation took a different mode from that of US and European cities, in which pre-existing agricultural villages were integrated into expanding urbanised areas, as captured by McGee

(1991)'s "Desakota Model". It is because that "[i]n Japan as in other Asian rice-growing countries, pre-industrial farming and land ownership patterns are radically different than those of either Europe and North America...farmers have played a much more important direct role in urbanization in Japan than in other developed countries" (Sorenson, 2011: 214-216). Notably, this mode of suburbanisation created a mixed constellation of newcomer and traditional communities within Tokyo's suburban territory (Chiikisōgōkenkyūjo. ed., 1989). In fact, while the current population of Tokyo's suburban territory is about 4.2 million, it is assumed that three-fourths of the population is rooted in newcomer communities, and one-fourths is rooted in traditional communities (Ike, 2015). As discussed in the later part of this research, this mixture has generated specific suburban phenomena in Tokyo Metropolis.

Overall, during this period of residential suburbanisation, suburban spaces became the main places of Molotch (1976)'s "growth machine", in which "the desire for growth provides the key operative motivation toward consensus for members of politically mobilized local elites...the very essence of a locality is its operation as a growth machine" (Molotch, 1976: 310). Besides, suburban spaces provided investment opportunities for various actors and stakeholders, as Beauregard (2006: 5-6) claims that "[s]uburbanization provided the investment in new construction and the purchase of consumer goods that, along with rising exports to Europe, anchored national prosperity." Similarly, Tokyo's outer suburban territory, which was the key site in suburban planning and development, served as the main place of Molotch (1976)'s "growth machine" especially during rapid economic growth, rather than the inner suburban territory.

## **2.5.2 Emergence of a Post-suburban World under Polycentric Formation**

Alongside the post-fordist polycentric formation, suburban spaces have experienced new transformations, which are often referred to as 'post-suburban' phenomena. Generally, employment decentralisation takes place, following residential suburbanisation (Mieszkowski and Mills, 1993). As mentioned above, polycentric metropolitan structures have emerged in the late 20th century, alongside the formation of self-contained suburban centres. Consequently, especially in US cities, the relationship between cities and suburbs has turned inside out, as Muller (1997: 45) claims that "[i]n essence, the American city has turned inside out since about 1970, thereby constituting the most profound social and economic transformation in its history". Consequently, commuting patterns have changed, as Beauregard (2006) notes:

"By 1980, the majority of those residents lived in the suburbs...Throughout most of the twentieth century until the 1970s, only small number of central-city residents commuted to jobs in the suburbs. When job growth in the suburbs accelerated in the 1980s, reverse commuting (from central city to suburbs) increased, as did suburb-to-suburb commuting." (35-36)

Alongside this polycentric formation, various suburban phenomena have begun to attract much attention, as Teaford (1997: 1) notes that "[b]y the 1980s and early 1990s a number of

commentators were discovering a new phenomenon along the fringe of metropolitan America". Consequently, there have emerged various lexicons, which include the following: "urban villages" (Leinberger, 1988; Leinberger and Lockwood, 1986), "edge cities" (Garreau, 1991), "edgeless cities" (Lang, 2003), "zwischenstadt, or in-between city" (Sieverts, 2003), "exopolis" (Soja, 1996), "ex-urbs" (Soja, 2000), "technoburbs" (Fishman, 1987), "boomburb" (Lang and LeFurgy, 2007), and "stealth cities" (Knox, 1992). These lexicons serve to "signal the rise of something different from the traditional suburb" (Phelps and Wood, 2011: 2591). For instance, Garreau (1991) captures the formation of large, self-contained suburban centres, each of which has multiple functions of residence, business, commerce and leisure, in the form of being independent from the nearest city centre.<sup>2</sup> One famous example of "edge cities" is the Tysons Corner located in Virginia of the US, which begun to be developed as an information technology centre in the early 1960s. Against Garreau (1991)'s "edge cities", Lang (2003) claims "edgeless cities", each of which is "a form of sprawling office development that does not have the density or cohesiveness of edge cities, account for two-thirds of the office space found outside downtowns" (Lang, 2003: 1).<sup>3</sup> In these ways, various lexicons have been developed to capture new suburban transformations under polycentric formation (Keil, 2013).

Consequently, the term 'post-suburban' has emerged in the way that these lexicons are "grouped together under the umbrella term post-suburbia" (Phelps and Wood, 2011: 2591). Initially, Kling, Olin and Poster (1991: 6) coined this term by suggesting "a new postsuburban spatial form" of polycentricity. However, currently, different scholars and commentators have used this term in different ways. For example, Lucy and Philips (1997) define this term as follows:

"We define a post-suburban era in terms of inner suburban population loss and relative income decline, suburban employment increase, suburban outcommuting reduction, exurban population and income increase, and farmland conversion." (259)

Suggesting that "[o]ur use of the term "post-suburban" is different...from its use by Kling et al. (1991)" (Lucy and Philips, 1997: 260), they capture the decline of inner suburban cities (under the growth of outer suburban, or exurban, cities) as a new post-suburban phenomenon. In this regard, stressing the necessity to tackle inner suburban decline, Lucy and Philips (2000) note:

"From our perspective, the period of mature suburbs blends with the postsuburban era. The postsuburban era is characterized by many suburbs losing population, many suburbs declining in income of residents relative to regional income, and exurban rural areas, growing rapidly in population at extremely low densities and, for the first time, matching or exceeding the median income of families in the metropolitan region...In many instances, suburban decline has been more rapid than central city decline. As suburbs age, they are vulnerable to decline similar to the decline previously experienced by central cities. As employment decentralizes, the territory from which workplaces are accessible increases proportionately. Suburbanization threatened central cities. Exurbanization constitutes a similar, perhaps greater, danger to suburbs." (5-6)

<sup>2</sup> Garreau (1991: 6-7) proposes the following five criteria for "edge cities": 1) "has five million square feet or more of leasable office", 2) "has 600,000 square feet or more of leasable retail space", 3) "has more jobs than bedrooms", 4) is perceived by the population as one place", and 5) was nothing like "city" as recently as thirty years ago".

<sup>3</sup> For details, also see Lang and Lefurgy (2003).

For another example, Borsdorf (2004) attempts to define the post-suburban era by various dimensions, such as impulses, conditions, image, infrastructure, forms and structure, actors, results, and functions. However, there is still no consensus about the definition of a post-suburban era, as Phelps (2015: 16) claims that “the critical commentary has some ambiguities when defining a post-suburban era. The literature has also been vague when defining post-suburban settlements in geographical terms”. In this situation, many urban scholars and commentators have explored new post-suburban phenomena more deeply than ever before.

Similarly to other polycentric metropolises, the Greater Tokyo Area has formed a polycentric metropolitan structure mainly since the 1980s with the policy measures for the BCCs (e.g. Ikeda, 1999; Ishida, 1992; Miyake, 2005a; Oki, 2011; H. Sato, 2010, 2016; Sorenson, 2001b; Takahashi, 1998; Togo, 1993); thus, it might be considered that Tokyo’s suburban territory entered the post-suburban era in the early 1980s. Notably, this polycentricity has been generated by political forces, rather than economic forces. As contrasted with the US as a “regulatory, or market-rational, state”, Japan is regarded as a “developmental, or plan-rational, state”, in which the government sector has made stronger interventions into the market (Johnson, 1982: 19).<sup>4</sup> In this respect, Johnson (1995: 67) mentions a contrast between “a strong state and a weak society” for Japan and “a weak state and a strong society” for the US. Even though Japan has gradually been shifting “from being ‘developmental’ toward having a ‘regulatory’ profile” under through “deregulation, decentralization, and de-bureaucratization” (Nakamura, 2011: 932), the role of the government sector has still been dominant in Japan, especially in the field of urban policies and planning. In this vein, differently from US cities in which “edge cities” (Garreau, 1991) have been crystallised through market-based self-organising processes (Krugman, 1996), the polycentric spatial structure of the Greater Tokyo Area has been materialised by proactive public interventions, as detailed in Chapter 5.<sup>5</sup> Consequently, the suburban employment nodes of the Greater Tokyo Area have been developed in the form of being “located a considerable distance from the old central area and may have profound long-term impacts on the urban structure” (Sorenson, 2001b: 29). Thus, this polycentric metropolitan structure has served as a base layer of recent Tokyo’s suburban restructuring in the context of stagnation and/or decline.

### 2.5.3 Shrinking Cities and Suburban Decline

Tokyo’s suburban territory is positioned not only in the debates of suburban transformations, but also in those of shrinking cities. Recently, the shrinking city phenomenon has become one of important research topics in the discipline of urban studies and planning (e.g. Audirac et al.,

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<sup>4</sup> Johnson (1982) specifically speaks to the past economic development policy of GOJ that actualised the past rapid economic growth, as often expressed by the term ‘Japan, Inc.’ with the convoy system under the initiative of GOJ.

<sup>5</sup> The Japan Institute for Labor Policy and Training (2006) identifies Japanese-version “edge cities” in the Greater Tokyo Area with use of different criteria from Garreau (1991)’s work. Their criteria are the following three factors: 1) change in the ratio of daytime population to nighttime population, 2) the ratio of employment (workplace) to employed population (residence), and 3) commercial floor area per inhabitable area.

2012; Buhnik, 2014; 2017; Cunningham-Sabot et al., 2014; Fol, 2012; Hattori, Kaiko and Matsuyuki, 2017; Mallach, Hasse and Hattori, 2017; Martinez-Fernandez et al., 2016; Wiechmann and Pallagst, 2012; Yahagi, 2009). In the 1990s, one-fourths of large cities in the world have shrunk (Rieniets, 2006); 13 percent of city-regions in the US and 54 percent of those in the European Union (EU) have experienced population decline in recent years (Wiechmann and Pallagst, 2012). While shrinking cities have experienced economic and/or socio-demographic declines in simple terms (Audirac et al., 2012), they have caused various issues and problems, such as “a large variety of “spatial mismatches”...ranging from education mismatches to investment mismatches (Pallagst, Martinez-Fernandez and Wiechmann, 2014: 4) and “risks of socio-spatial fragmentation” (Fol, 2012: 259). These shrinking cities are mainly located in the Global North, as Wiechmann and Pallagst (2012: 261) notes that “shrinking cities do not occur everywhere...in certain areas, like the American rustbelt, Japan and, in particular, Europe” (Wiechmann and Pallagst, 2012: 261).

Yet, shrinking cities are the results of “a multicausal process”, incorporating “spatial changes, at all scale levels” (Hospers, 2013: 79). Therefore, various shrinking phenomena can be observed, ranging from declining industrial capitalist cities to devastating city centres under urban-to-suburban migrations (e.g. Beauregard, 1993; Oswalt and Rieniets, 2006). As one typical case, urban scholars and commentators have begun to explore the shrinking processes of fordist-type industrialist cities (Couch et al., 2004). Representative cities of this type are as follows: Detroit and Youngstown in the Rustbelt of the US, Manchester and Liverpool in the UK, and Leipzig in Germany. Typically, these cities are specialised industrial cities, each of which tends to face “regional instability and structural changes through over-concentration in a narrow range of industrial sectors” (Pike, Rodriguez-Pose, Tomaney, 2006: 109). Whilst shrinking cities are not new phenomena (Beauregard, 2012; Martinez-Fernandez et al., 2012), they have been increasingly understood under a shift “from the “traditional” explanations of urban decline to more recent approaches of globalization and “glocalization”” (Cunningham-Sabot et al., 2014: 14). Accordingly, urban scholars and commentators have increasingly explored the global and local dynamics of shrinking cities, suggesting that these dynamics should be considered the “spatial manifestation of globalization” (Martinez-Fernandez et al., 2012: 214) and/or “the combination of global processes and local configurations” (Martinez-Fernandez et al., 2016: 1).

However, shrinking cities are not identical to declining suburbs. It is because suburban shrinkage exists even within growing city-regions. In this regard, Beauregard (2012: 20) notes that “[s]hrinkage, moreover, is not confined to cities; depopulation has occurred at other spatial scales. Certain types of suburbs have also become smaller”. While suburban shrinkage is mostly observed in industrial suburbs or inner suburbs (Beauregard, 2012), the decline of inner suburbs, which were previously “the icons of the “American Dream”” (Vicino, 2008: 554), has been increasingly paid attention especially in US cities (e.g. Beauregard, 2012; Hanlon, Short and Vicino, 2009; Hanlon, Vicino and Short, 2006; Lucy and Philips, 1997, 2000; Vicino, 2008; Vicino,

Hanlon and Short, 2007). In this regard, Vicino, Hanlon and Short (2007) note that “inner suburban decline juxtaposed against the growth of the outer suburbs acts as the visible evidence of suburban restructuring in this distinguishing characteristic of Megalopolis”. In this process, inner suburban cities have experienced declining phenomena, such as population loss and aging, increased low-income households, depreciated land and property values, and decreases in tax revenues. In this regard, Hanlon, Short and Vicino (2009: 188) suggest:

“With the gentrification of inner-city neighborhoods and the development of high-end suburbs on the outer fringe, suburbs in crisis have become the most affordable places left for many minority groups...Suburbs in crisis are typically minority suburbs close to the border of the traditional urban core. They are suburban neighborhoods with high poverty rates and low household income. If the population is growing, it is only the result of an influx of Hispanics, immigrants, and Blacks. The existence of these suburbs in crisis exposes the dark side of US suburbanization, what we have identified as the suburban gothic. These suburbs are the new metropolitan calamities of the US. The suburban dream has been replaced by the suburban gothic.” (188)

This type of inner suburban shrinkage can also be observed in European countries. For instance, in France, it has been observed in former industrial areas located within inner suburbs, such as Saint-Denis in Paris, being accompanied with the out-migration of affluent households into outer suburbs (Fol, 2012). Similarly, in Australia, middle-ring suburbs built up through the post-war housing boom, which have accommodated low- and/or medium-income families, have showed signs of shrinkage (Randolph and Freestone, 2011). Yet, there is a great difference in the mode of suburban shrinkage between Tokyo Metropolis and US or European cities. That is, Tokyo Metropolis has experienced outer suburban shrinkage against inner suburban re-growth, after the relative dynamics between inner and outer suburbs have turned inside out within the contextual transition from growth to shrinkage.

In Japan, the debates of shrinking cities have gradually emerged since the late 2000s (e.g. Hattori, Kaido and Matsuyuki, 2017; Mallach, Hasse and Hattori, 2017; Martinez-Fernandez et al., 2016; Yahagi, 2009), especially for those located in provincial areas. However, overall, shrinking cities have been less examined, as Hattori, Kaido and Matsuyuki (2017) notes:

“No discourse on urban shrinkage truly existed in Japan until quite recently. Things have changed, however, beginning with the Yubari bankruptcy in 2007 and the publication of the National Census of 2010...Furthermore, the publication of Masuda Report in 2014 was a shocking eye-opener for the general public, particularly by its suggesting that the consequence of urban shrinkage is the literal disappearance or “vanishing” of many of Japan’s cities.” (131)

The ‘Masuda Report’ was published in 2014 by the Japan Policy Council (JPC), a private-sector entity headed by Mr. Masuda who served as the former minister of the Ministry of Internal Affairs and Communications (MIAC) (during 2007 to 2008) and former governor of Iwate Prefecture (during 1995 to 2007) located in provincial areas. JPC (2014) alarms that 896 municipalities, which account for 49.8 percent of the total in Japan, now face a danger of the future extinction; most of these dying municipalities are those in provincial areas. The primary reason for their

future extinction is the out-migration of young generations from provincial areas into metropolitan areas, resulting in the decreases in the number of females aged 20 to 39 and fertility rates in provincial areas (JPC, 2014). In this regard, some urban scholars and commentators suggest that shrinking cities in Japan have different causal relationships from those in US and EU cities, as Mallach, Hasse and Hattori (2017) suggest:

“While the underlying drivers of shrinkage are in all cases both demographic and economic, there are significant differences in which demographic and economic factors have been most significant, and how they have manifested themselves in the different countries...Urban shrinkage in Japan is first and foremost a product of demographic change. Low birth rates, a rapidly aging population, and a national trend of pronounced population decline...In marked contrast to Japan, shrinking cities are very much a regional phenomenon, disproportionately located in the older industrial regions of the nation, the Northeast and Midwest, while the decline has been far more precipitous, particularly in the cities like Detroit, Cleveland or Youngstown...As the German and United States experience shows, deindustrialization is a major factor in urban shrinkage...While deindustrialization has been taking place in Japan since the mid-1900s (Uemura & Tahara, 2014), even today it is only a secondary factor in urban shrinkage.” (103)

Broadly, this suggestion can be applied to shrinking cities in Japan, especially those in provincial areas which have faced population decline and aging under the continued out-migration especially into the Greater Tokyo Area. However, the shrinking processes of Tokyo's suburban territory are quite different from those of provincial areas. Tokyo's suburban shrinkage has been complicatedly generated by a mixture of political and administrative, economic and socio-demographic factors, mainly due to the specific political and geographical positioning with the intermediate proximity to the metropolitan city centre and existing diversified economic and socio-demographic conditions.

From a political and administrative perspective, GOJ and TMG have shifted their political and policy emphasis towards the strengthening of the metropolitan city centre under the global competitiveness agenda mainly since the early 2000s. In this regard, Saito (2012: 219-220) notes that “the basic policy direction that the Tokyo Metropolitan Government (TMG) and national government have taken so far has focused on strengthening the center core area of Tokyo...It is regarded as a key location for creating wealth in the globalized economy and thus is given privileged treatment”. In this vein, GOJ has implemented a series of deregulations to promote private-sector investment-led urban renewal mainly within Tokyo's urban territory, triggering the strong back-to-the-city movement of workplace and residence (Hatta, 2006). This has resulted in the rapid transitions among different phases of urbanisation, as Ushijima (2005) suggests that Tokyo Metropolis has entered the phase of reurbanisation without experiencing disurbanisation from the perspective of the stages of urban development by Klaassen, Bourdres and Volmuller (1981) and Van den Berg et al. (1982). Besides, GOJ has recently promoted a compact city strategy with the promotion of transit-oriented development; the compact city has now become one of major policy and planning directions worldwide to make cities more sustainable,



economically efficient, socially equitable and environmentally friendly (OECD, 2014).<sup>6</sup> Until now, differently from US cities, the metropolitan city centre, as the strongest political and economic powerhouse in Japan, has continued to be affluent even during the past massive suburbanisation, as Sorenson (2011: 213) notes that “sprawl in Japan has not led to a collapse of central city centre”. In this situation, the recent political and policy shift has increasingly magnified the magnetic powers of the metropolitan city centre, resulting in the acceleration of suburban shrinkage. In this way, Tokyo’s suburban territory has been influenced by specific changes in the political and administrative dimension.

Besides, from an economic viewpoint, Tokyo’s suburban territory has faced specific economic restructuring. It is because Tokyo’s suburban territory has accommodated various economic activities, including those in manufacturing industries which in-migrated from the urban territory during suburban growth (Ikeda, 1999). Alongside the continued industrial advancement and deindustrialisation, Tokyo’s suburban territory has been struggling with new economic conditions under the situation that “[g]lobalisation has made economic activity relatively more mobile or footloose” (Pike, Rodriguez-Pose, Tomaney, 2006: 8). Moreover, from a socio-demographic viewpoint, Tokyo’s suburban territory has accommodated diverse socio-demographic groups, such as different income-level households and individuals or groups with distinguished social and cultural values. This is partly evidenced by the mixture of newcomer and traditional communities. These different socio-demographic groups have been responding to the new conditions of suburban shrinkage in varied ways. Furthermore, from a spatial viewpoint, Tokyo’s suburban territory has been positioned in the spatial context of polycentricity. Now, Tokyo’s polycentric spatial structure has begun to deform, especially within the outer suburban territory. Consequently, there have emerged specific phenomena, including spatial polarisation and social segregation (Koizumi, 2010) and area differentiations among nearby-station areas (Song and Deguchi, 2013) within Tokyo’s suburban territory. In these ways, suburban shrinkage of Tokyo Metropolis is quite different from shrinking phenomena in the provincial areas of Japan in political and administrative, economic, socio-demographic and spatial terms.

In this vein, the shrinking phenomena of metropolitan areas have been less examined in Japan, compared with those of provincial areas. In this regard, Martinez-Fernandez et al. (2016: 14) note that “there has been absolutely no attention given to the problem of seemingly irreversible shrinkage among the majority of cities with populations over 100,000” in Japan. In this situation, Buhnik (2014, 2017) significantly examines the shrinking processes of the Osaka-Kyoto-Kobe city-region, as the second largest urban agglomeration in Japan, which have been substantially affected by the uni-polarisation of the Greater Tokyo Area. However, because Tokyo Metropolis as a whole has still been growing owing to the in-migration from provincial areas, its suburban shrinkage has been comparatively less examined. Especially, underlying political and policy

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<sup>6</sup> According to OECD (2012: 27-28), the key characteristics of the compact city are as follows: 1) “dense and proximate development patterns”, 2) “urban areas linked by public transport systems”, and 3) “accessibility to local services and jobs”.

dynamics have been less explored specifically for Tokyo's outer suburban shrinkage, whilst some urban scholars and commentators have gradually paid attention to the economic, socio-demographic and/or fiscal decline of the Greater Tokyo Area (e.g. Iijima, 2016; ITMR, 2011; Koizumi, 2010; Kubo, 2015; Miura, 2011, 2012, 2017; Song and Deguchi, 2013; T. Yoshida, 2010).

#### **2.5.4 Future Possibilities of Outer Suburban Shrinkage**

From an international perspective, outer suburban shrinkage has received little attention, compared with inner suburban shrinkage. However, recently, US cities have also begun to experience the decline of outer suburbs and revival of central cities after the economic crisis of 2008, as Gallagher (2013) notes:

“[o]ur largest cities, meanwhile, grew at a faster rate than any of their suburbs for the first time in one hundred years. To some degree this is a reaction to our recent housing crisis, which saw so much overexpansion especially in the exurbs. But it's also the first time since the invention of the automobile that our outward migration pattern has reversed...As poverty has invaded the suburbs, wealth has rushed back to into cities.” (13-16)

Since the 1990s, US cities have experienced the continued suburbanisation of poor people and low-waged jobs, as Raphael and Stoll (2010: 1) note that “[t]he poor are more suburbanized in metropolitan areas with greater employment decentralization”. Simultaneously, there have gradually been observed “a declining number of subcenters and a declining proportion of jobs in subcenters” (Gordon and Richardson, 2007: 292). After the poverty penetrates throughout entire suburban spaces, the decline of outer suburban cities might more obviously appear even in US and European cities. In this situation, this research that explores declining outer suburban cities would provide significant policy and planning implications for major US and European metropolises. Simultaneously, it would also contribute to the field of urban planning and management of rapidly growing large cities in the Asia region, as Sorenson (2004: 6) notes that “[t]he Japanese case is also interesting because it is revealing of some of the planning dilemmas particular to an East Asian country experiencing rapid economic and urban growth... the Japanese experience will hold many lessons, both positive and negative, about urbanisation and urban planning issues in the Asian context”.

### **2.6 New Perspectives in a Post-suburban World**

#### **2.6.1 Suburban Politics and Governance as an Important Research Agenda**

Until recently, post-suburban research has not paid much attentions to underlying political and policy dynamics, especially from an international comparative perspective. At the early stage of post-suburban research, it tended to examine the aspect of forms, as Phelps et al. (2006b: 12)

note that “[c]omparative analysis of post suburban developments has been blighted by an over-concentration on physical *form* which may well be the most exceptional aspect of its development in different national settings”. Even while exploring the aspect of functions, it tended to be limited to economic phenomena, as Phelps et al. (2006b: 13) note that “[i]n the light of the recent interest in technoburbs and edge cities, the function of post-suburbia is often seen as primarily economic...these places are also socially and politically dynamic”. Then, post-suburban research has been expanded to examine social and cultural aspects, as observed by Mace (2013)’s work that explores “the underlying, hidden elements of social relations” (Mace, 2013: 20).

In this situation, suburban politics and governance in a post-suburban world have recently been recognised as one of significant agendas in the post-suburban research.<sup>7</sup> Alongside the spatial enlargement, functional expansion and actor diversification of suburban spaces, these spaces have increasingly come “to embody new political sensibilities to set beside those having to do with urban and suburban ways of life and associated ideologies and politics” (Phelps, 2015: 170). Consequently, these spaces have come to incorporate “different types of urban regime transforming from a ‘pure’ suburban form of Molotch’s (1976) “growth machine”” (Phelps, 2012a: 671). Thus, new political and policy conflicts and tensions have emerged in post-suburban spaces. For instance, Phelps (2012a: 677) observes the following conflicts and tensions: (a) “economic growth versus conservation”, b) “economic growth versus expenditure on collective consumption and production”, and c) “governmental amalgamation or secession”. Simultaneously, under the process of globalisation, suburban spaces have come to “internalize a contradictory regional politics - one held between the bounded territoriality of institutional structures and the unbounded nature of globalizing urbanity” (Keil and Addie, 2015: 909), resulting in the complexity of suburban politics and governance. Because “politics and governance intervene and shape the chain of causality that produces outcomes” (Young, 2015: 53), it is essential to explore suburban politics and governance for an understanding of post-suburban spaces (Phelps, 2015), paying attention not only to causes and effects but also to underlying mechanisms. However, overall, these aspects in a post-suburban world have been little examined (e.g. Ekers, Hamel and Keil, 2015, Phelps, 2015; Young, 2015). In this regard, Ekers, Hamel and Keil (2015) suggest:

“Whether by means of urban regime theory, growth coalitions, regulation theory, or accounts of urban social movements, we have many conceptual resources for understanding how urban-regions are planned, built, and struggled over. However, much less attention has been paid to the question of suburban governance – specifically, to the constellation of public and private processes, actors, and institutions that determine and shape the planning, design, politics, and economies of suburban spaces and ways of life...As well, any survey of the existing literature would reveal that it is exceedingly difficult to pin down exactly what suburban governance means and how it is practised, in part because of the proliferation of terms used to describe suburban forms of urban

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<sup>7</sup> Generally, there is the recent shifting trend from ‘government’ to ‘governance’; in definition, governance is “to all processes of governing, whether undertaken by a government, market, or network, whether over a family, tribe, formal or informal organization, or territory, and whether through laws, norms, power, or language” (Bevir, 2012: 1).

decentralization.” (19-20)

In recent decades, it has been increasingly considered important to explore different modes of suburban politics and governance within different national settings and at different phases of urbanisation from an international comparative perspective (Hamel and Keil, 2015). In this vein, “Suburban Governance: A Global View” edited by Hamel and Keil (eds.) (2015) would be one of important works to create new horizons; in their work, an overall framework consisting of the three dimensions of “state”, “capital” and “forms of authoritarian” is set up for international comparisons. In their work, Ekers, Hamel and Keil (2015: 25) suggest that “[s]uburban governance entails accounting for both the converging and diverging patterns of peripheral development...paying attention to the varied agents, methods, relations and institutions through which development...as the mechanisms of suburban governance”. That is, suburban spaces have the specific conditions of politics and governance, which are quite different from those of urban spaces. In this vein, local affairs associated with suburban governance have been less examined, as Young (2015) suggests:

“At the national level, these patterns have generally been explored by other analysts upon whom we can rely. But there is often a serious lacuna at the local level. So to understand suburban governance, we need to study the local state and what drives the key actors - economic growth, benefits for business, interests of actors present in the local area, how they interact with the state and what is the range of their autonomous action.” (52)

In this situation, even in Hamel and Keil (eds.) (2015)’s work, suburban politics and governance under suburban shrinkage have been less examined. This is especially applied to local affairs. Therefore, this research that explores underlying political and policy dynamics at both metropolitan and local levels would make contributions to the recent research agenda of post-suburban debates.

Besides, in the debates of shrinking cities, the necessity to explore underlying political and policy dynamics from an international comparative perspective has been increasingly emphasised, as Großmann et al. (2013: 223) suggest the importance of “[s]hifting attention from causes to the context and dynamics of shrinkage” and “cross-national learning and knowledge transfer”. It is partly because shrinking processes have incorporated specific political and policy dynamics that are different from those of growing processes; notably, political and administrative factors become more important to be explored for an understanding of shrinking cities (Kamo, 2016). In this vein, the debates of shrinking cities have also paid increased attention to policy responses at the local level, as Martinez-Fernandez et al. (2016: 2) note that “[t]he manifestations of this phenomenon take different forms at the local level providing various responses and processes for how to deal with the demographic, urban and socio-economic impacts of shrinkage”.

Yet, until recently, challenges towards shrinking cities have “seldom appeared on the agendas of politicians and governmental planners” (Wiechmann and Pallagst, 2012: 261). It is partly

because “[s]hrinkage as such is not difficult to problematize from an analytical perspective, but difficult to frame as a matter of policies and action” (Mallach, Hasse and Hattori, 2017: 104). This is especially applied to Japan, as Hattori, Kaido and Matsuyuki (2017) suggest:

“While the issue of shrinking cities has now become a matter of national policy attention, significant concrete political steps are not yet visible. In the meantime, not only the general public but also the academic world have tended to focus on more narrowly defined, tangible topics, in particular vacant housing as a problem of urban shrinkage, rather than more comprehensive themes of city planning or public policy.” (131)

Under the situation that urban scholars and commentators consider that national policy actions against shrinkage are still ambiguous, local affairs have not been seriously explored. It is partly because of less actions in Japanese local governments as Mallach, Hasse and Hattori (2017: 105) suggest that “the absence of a strong tradition of independent local policy formation has meant that local initiatives to address issues of shrinkage to date have been fewer and more limited than in the United States”. It is true that local governments in Japan have less powers and responsibilities, compared with those in the US and EU. However, Tokyo’s suburban municipalities have been comparatively affluent enough to take various local actions, compared with other municipalities, such as those in provincial areas.<sup>8</sup> Due to a sense of crisis, local governments and communities have gradually begun to take actions against shrinkage, as Martinez-Fernandez et al. (2016) suggest:

“Throughout the modern period the Japanese government has been quite centralised and the central government has traditionally set the policy framework in areas ranging from city planning to industrial, welfare, education, and environmental policies...there is little opportunity for policy innovation at the local level...Despite these historical realities, from the 21st century the subject of decentralisation has become an important policy-related topic...in the era of shrinking cities a fierce competition among cities has emerged as different cities market their historical, cultural, and natural assets to produce their own local products and promote locally based tourism. Hence cities and regions are increasingly engaging in a practice of what could be called “local branding” as they create an assortment of unique products and tourism related events and services as a form of local development.” (13)

This has been accelerated by the recent progress of decentralisation of powers and authorities. Urban management and governance in Japan have steadily been changing under the process of decentralisation, especially after the enactment of the Omnibus Decentralisation Act of 2000. Thus, the decentralisation in the field of urban planning and development in Japan has been accelerated especially since the early 2000s (Uchiumi, 2010).<sup>9</sup> In this vein, a new urban planning proposal system has been established through the enactment of the Act on Special

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<sup>8</sup> Martinez-Fernandez et al. (2016: 13) note that “the Japanese government has been quite centralised and the central government has traditionally set the policy framework in areas ranging from city planning to industrial, welfare, education, and environmental policies...prefectural and local governments must not deviate from this framework...local governments have limited financial resources, as is apparent in the fact that they can only raise about 30-percent (on average) of what is needed for necessary government services and projects, there is little opportunity for policy innovation at the local level. Thus local governments in Japan are often said to possess “thirty-percent autonomy”. However, it can be considered that this “thirty-percent autonomy” is not simply applied to Tokyo’s suburban municipalities, which are comparatively affluent on the national average.

<sup>9</sup> Prior to this, municipal governments have been empowered to prepare City Master Plans (in line with City Planning Area Master Plans prepared by prefectural governments) through the 1992 revision of the City Planning Act of 1968.

Measures concerning Urban Reconstruction of 2002 and the 2002 revision of the City Planning Act of 1968. In this system, landowners, NPOs and private-sector entities can make planning and development proposals to the government sector. Moreover, a new policy instrument related to the Township Management Organisation has been established under the Law on Improvement and Vitalisation in City Centre of 1998, which has contributed to city revitalisation through collaborations among different actors. Furthermore, locality-based community activities have been accelerated by the enactment of the Act on Promotion of Specified Non-profit Activities of 1998. The recent progress of decentralisation has widened the possible actions of local governments and their communities in local planning and development (Jangshik and Takamizawa, 2014). While local governments and their communities have taken time to make better use of these legal and institutional frameworks, Tokyo's suburban municipalities have gradually begun to make specific local actions against shrinkage, differently from other shrinking cities outside Tokyo Metropolis. These actions have been accelerated by the retreat of upper-level governmental entities and global economic actors. Therefore, even for Tokyo's suburban territory, "[t]he local arena is an important scale at which social and political values are produced, but this process is not addressed in current research" (Tomaney, 2017: 104). Therefore, for an understanding of recent Tokyo's suburban restructuring, it is essential to explore underlying political and policy dynamics at both metropolitan and local levels, paying attention to all tiers of government and their relationships to private and community sectors. By this, this research can contribute to the recent research agendas in both the debates of post-suburban transformations and shrinking cities.

## **2.6.2 Key Perspectives to Explore Suburban Politics and Governance**

To address suburban politics and governance, the following key viewpoints are important, namely: 1) inter-governmental dynamics among different tiers of government and among municipal governments, 2) inter-sectoral dynamics among different policy domains, and 3) inter-actor dynamics among the public, private and community sectors. Here, in this research, inter-governmental dynamics among different tiers of government are regarded as the vertical dimension of government, and inter-governmental dynamics among municipal governments are as the horizontal dimension of government. Thus, inter-sectoral dynamics are regarded as the intra-governmental dimension. These key viewpoints help us explore underlying political and policy dynamics, because policy-making processes, such as settings of policy agendas and their prioritisation, are important to be examined for an understanding of urban policies (Hayakawa, 2004).

Firstly, vertical inter-governmental dynamics are the key when exploring post-suburban spaces. Phelps (2015: 27) notes that "[t]he difficulty of delimiting post-suburbia implies at the very least the need to embrace nonlocal political relations in theorizing urban politics and, perhaps more profoundly, a sense of relational nature of this politics". This "nonlocal political relations" (Phelps,

2015: 27) creates the complexity of post-suburban politics and governance, because the interests and concerns of different tiers of government show “converging and diverging patterns” (Ekers, Hamel and Keil, 2015: 25). In this regard, Phelps (2015) continues:

“The failure of traditional models of urban politics to incorporate nonlocal governmental relations is widely recognized. Yet the mutation of suburban into post-suburban ideology and politics has entailed governance at new spatial scales - most notably the county, but also larger pan-county regions in the United States...I suggest that the “in betweenness” of edge cities, edgeless cities, and technoburbs that constitute the post-suburban economy - an economy caught between forces of centrality and dispersal - is paralleled by an in betweenness of political relations.” (27)

Vertical inter-governmental dynamics tend to radically change with the contextual transition from growth to shrinkage. Generally, different tiers of government have distinctive interests and concerns based upon their roles and responsibilities partly because of their different spatial coverages of public administration. Within the contextual transition from growth to shrinkage, changes in international and domestic forces tend to create differentiated economic and/or socio-demographic impacts on their administered spaces. Consequently, different tiers of government make distinctive responses and behaviours against these changes, depend on their own specific logic and rationale of policy-making processes. Besides, there are also reciprocal interactions among different tiers of government, in which changes in the political and policy directions of upper-level governmental entities impacts those of lower-level governmental entities. Simultaneously, horizontal inter-governmental dynamics among municipal governments are also important to be explored. The conditions of either inter-municipal coalition or competition tend to change at different phases of urbanisation. Some urban scholar and commentators have observed “growth coalition” (Logan and Molotch, 2007; Molotch, 1976) especially under suburban growth. However, this sort of inter-municipal relationship tends to greatly change within the contextual transition from growth to shrinkage.

Secondly, inter-sector dynamics are important to be explored especially in the context of Japan. Fukukawa (1997) notes that the planning system of Japan has stronger sectionalism due to the centralised system, compared to that of the US with the relatively decentralised system. In Japan, this sectionalism stems from the rapid economic growth period when there was an urgent issue to cope with rapid urbanisation and industrialisation. Alongside the formation of the sectionalism of GOJ, the sectionalism of local governments has formed in the way of being best suited to national-level legal frameworks (Fukukawa, 1997).<sup>10</sup> Thus, inter-sectoral dynamics within a given governmental entity tend to change within the contextual transition from growth to shrinkage. Besides, recently, all tiers of government have faced the increased necessity of inter-sectoral reforms under their fiscal limitations. Especially at the local level, policy

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<sup>10</sup> As one crucial event related to the creation of sectionalism, urban and agricultural lands have come to be separately administered by different ministries under the different laws of the City Planning Act of 1968 and the Act on Establishment of Agricultural Promotion Regions of 1969 (Fukukawa, 1997). From another viewpoint, this sectionalism is relevant to the National Land Use Planning Act of 1974, in which national lands in Japan have been divided into the following five areas: 1) urban, 2) agricultural, 3) forestry, 4) natural park, and 5) natural preservation. For details, see Mizuguchi (1997) and Sorenson (2004).

coordination among different policy domains has increasingly become crucial in the context of shrinkage (Ichizyo, 2013). In this situation, social welfare issues accrued by population aging and decline have increasingly made greater impacts on local politics and municipal governance under shrinkage (Soga, 2016). Taking account of these, it is important to explore inter-sectoral dynamics among different policy domains.

Finally, inter-actor dynamics among the public, private and community sectors are essential to be addressed. Since actors and stakeholders involved in suburban affairs have been increasingly diversified, inter-actor dynamics have become more important to be explored. In this regard, Young (2015) suggests:

“The term “governance” draws our attention beyond the state. We are of course interested in state officials of all kinds...But we are also interested in the many agents that interact with the state and that pressure it to make particular decisions - including trade unions, citizens’ associations, political parties, religious institutions, the media, and other organized interests of all kinds.” (51)

Economic and non-economic (or social) actors outside of the government sector tend to make new actions when responding to the new conditions of shrinkage. The political and policy shift of the government sector has also influenced the thoughts and actions of these actors. Therefore, it is important to investigate inter-actor dynamics among different actors, especially paying attention to their changes within the contextual transition from growth to shrinkage. Here, in this research, different actors are categorised into economic actors (divided into global enterprises and local SMEs) and non-economic actors (or social) actors (divided into newcomer and traditional communities), as discussed later; the way of this categorisation was determined by closely investigating the information obtained through interviews.

Thus, an understanding of suburban politics and governance from these key perspectives would contribute to addressing the definition of post-suburban spaces, as Phelps (2015: 16) notes that “[d]efinitions that focus on the distinctive mix of interests and politics that may be apparent in post-suburban settlements prove more convincing...Ironically, the difficulty of defining and delimiting post-suburbs can be seen as critical to the politics of post-suburbia”. Moreover, importantly, this understanding would provide us with significant insights about how to re-work for suburban revitalisation, as Phelps (2015) notes:

“[T]he challenge of reworking suburban settlement space is enormously varied because of the different ways that suburban settlements relate geographically and temporally to the metropolitan regions of which they are a part. These challenges will likely necessitate new arrangements among governments at the county but also the regional level. The new post-suburban politics will not be fashioned by a small group of architects, planners, or politicians. Instead, any reworking of suburban space will be a political process in which all will need to be involved.” (14)

Furthermore, this understanding would give us important clues about suburban institutional development, since “the post-suburban polity is politically reassembled at all institutional state



scales” (Kei and Addie, 2015: 906). Over recent decades, there has been the increased awareness of “the role of political institutions because of their fundamental and formative role in creating the frameworks and conditions for local and regional innovation and transformation” (Pike, Rodriguez-Pose and Tomaney, 2016: 7).<sup>11</sup> This is applied to post-suburban spaces, while it is crucial to reflect the particularities of post-suburban spaces within their metropolitan contexts. Considering these, an investigation into the suburban politics and governance of Tokyo Metropolis would give us significant insights about how to develop institutional systems required to tackle suburban shrinkage.

## 2.7 Recent Conceptual and Theoretical Approach for Suburbanisation and Post-suburbanisation

Urban scholars and commentators have recently begun to conceptualise and theorise suburbanisation and post-suburbanisation from an international comparative perspective, under the situation that “there is a pressing need to consider seriously important elements of commonality alongside difference in international experiences of suburbanization” (Phelps and Wu, 2011: 11). In this vein, as a new conceptual and theoretical approach, Phelps and Wu (2011) propose an overall framework to overarch various suburban transformations within different national settings and at different phases of urbanisation. This framework shows typical suburban development processes of “City Region of Second Modernity”, as shown in Table 2-1. These are classified into the following five processes: iii) Post-suburb → City, iv) Growing suburb → Post-suburb → City, v) Stable affluent suburb → Stable affluent suburb, vi) Declining suburb → Sub-suburb? and vii) City → Suburb. The processes from iii) to v) are positioned in the condition of growth and by contrast, those from vi) to vii) are in the condition of stagnation and/or decline.

Table 2-1 Typical Suburban Development Processes of “City Region of Second Modernity”

Modern City	
i.	City → Suburb
Late Modern City Region	
ii.	City → Suburb → Post-suburb
City Region of Second Modernity	
iii.	Post-suburb → City
iv.	Growing suburb → Post-suburb → City
v.	Stable affluent suburb → Stable affluent suburb
vi.	Declining suburb → Sub-suburb?
vii.	City → Suburb

Source: Phelps and Wu (2011: 6)

<sup>11</sup> Amin and Thrift (1994: 12) stress “the importance of an institutional atmosphere in the creation and maintenance of agglomerations”.

Notably, Phelps and Wu (2011) criticise Lucy and Philips (1997)'s definition of the post-suburban transformation, which is indicated by ii) City->Suburb->Post-suburb of "Late Modern City Region" in Table 2-1, by suggesting the existence of more various, but typical, suburban transformations. In this regard, Phelps and Wu (2011) suggest:

"We present a number of scenarios of settlement evolution within the modern city, late modern city-region and, what might be labelled for simplicity's sake, the city-region of a second modernity. In contrast to the relatively predictable linear outward patterns of growth apparent in the modern and late modern periods we stress the highly variable settlement dynamics apparent within a second modernity." (5)

The benefits of this framework can be captured mainly from the following three aspects: commonalities (vs. differences), international comparisons, and an evolutionary perspective. An understanding of commonalities (and differences) among various suburban transformations would contribute to facilitating overarching conceptual and theoretical debates. Then, international comparisons have been increasingly considered important especially in this globalised world, in which (sub)urban transformations in different countries have been closely linked one another. Not only in the discourse of post-suburban transformations, but also in the discourse of shrinking cities, these comparisons have become increasingly important (Großmann et al., 2013; Martinez-Fernandez et al., 2016).

Thus, from an evolutionary perspective, Phelps and Wu (2011: 2) suggest that "post-suburb" would be conceived as a "temporal disparity" within Dick and Rimmer (1998)'s convergence and divergence processes at different phases of urbanisation, rather than the "radical break" (Dear, 2003: 504; Dear and Dahmann, 2008: 269). This evolutionary perspective with "a sensitivity to the historicity and spatiality of restructuring" (Tomaney, 1994: 183) would be crucial to introduce the aspects of path-dependencies into contemporary suburban debates. Ekers, Hamel and Keil (2015: 20) suggest that "[b]oth the form and content of different spaces are heavily path-dependent, reflecting different political, economic, cultural, and environmental histories". Yet, "some transformations are sudden, and others are gradual, planned, determined" (Lefebvre, 2003: 5). In this regard, the political and administrative dimension is slow to change, compared with the economic and/or socio-demographic dimensions, as Soja (2011a: 463) suggests that "the old administrative and political geography of national governments around the world have been among the slowest geography to change over the past four decades, especially when compared to economic and cultural reorganizations of space". Besides, this evolutionary perspective is useful to comprehend "important *continuities* apparent in state interventions (and their contradictions) between, for example, Fordist suburban growth machine politics and potentially post-Fordist, postsuburban politics apparent in city regions" (Phelps, 2012a: 693).

Here, Phelps and Wu (2011)'s framework is less concerned with suburban transformations in the context of shrinkage, as Phelps and Wu (2011) note:

“We are less concerned with aspects of settlement stasis and decline...Suburban stasis has been somewhat undermined in the US where greater variety in suburban social and ethnic complexion and economic performance has been apparent for quite some time (Hanlon et al, 2006; Orfield, 2002). Such decline may take on a rather different form, largely without the same implications for levels of income, in Japan as a result of demographic change.” (6)

In this situation, Tokyo's suburban transformation would contribute to improving this framework. This research targets the two sequential, but differentiated, periods, namely '1975 to 1995' in the context of suburban growth and '1995 to 2015' in the context of suburban shrinkage. The characteristics of these periods are summarised in Table 2-2. After the relative dynamics between Tokyo's inner and suburban territories has turned inside out, the suburban territory has been experiencing outer suburban shrinkage on the way of degenerating from post-suburban spaces. This suburban transformation could be considered one of the global frontiers of a post-suburban world. Considering these, Tokyo's long-term suburban transformation within the contextual transition from growth to shrinkage would be possibly incorporated into Phelps and Wu (2011)'s framework as one of the typical suburban development processes under suburban shrinkage.

Table 2-2 Positioning of Tokyo's Suburban Transformation from a Long-term Viewpoint

Context		Suburban growth	Suburban shrinkage
Time period		1975 to 1995	1995 to 2015
Typical suburban development process		Post-suburb	(To be discussed)
Overall characteristics		Formation of self-sustained suburban city-regions under policycentric formation	Intra-metropolitan polarisation and segregation under the back-to-the-city movement
Relative dynamics	Inner suburb	Lower growth	Re-growth
	Outer suburb	Higher growth	Shrinkage

Source: Author's own, developed from Phelps and Wu (2011)

Moreover, it is significant to integrate the recent research agenda of suburban politics and governance into Phelps and Wu (2011)'s framework. That is, it is important to explore what aspects of suburban politics and governance have been embedded in each of the typical suburban development processes. This integrated way of thinking would have a great potential of creating the new horizons of contemporary suburban debates. It would contribute to the conceptualisation and theorisation of suburbanisation and post-suburbanisation. It will also widen our knowledge and capabilities related to the future reworkings of post-suburban spaces by sharing successes and failures in suburban policy making and implementation in different cities. Considering these, this research explores what underlying political and policy dynamics have existed in Tokyo's suburban transformation as one possible, typical development process under suburban shrinkage. Thus, it would contribute to the recent research agenda of suburban politics and governance, as well as to the further development of Phelps and Wu (2011)'s framework.

## **2.8 Chapter Conclusion: Necessity to Explore Underlying Political and Policy Dynamics in Tokyo's Suburban Restructuring**

Analytical, policy and planning issues associated with post-suburban spaces have increasingly attracted academic attentions (e.g. Ekers, Hamel and Keil, 2015; Forsyth, 2012; Keil, 2013; Lang, Blackely and Gough, 2007; McGee, 2013; Phelps and Wood, 2011; Phelps, Wood and Valler, 2010; Phelps and Wu, 2011; Young, 2015; Vicino, 2008). In this situation, outer suburban shrinkage has been less examined especially for global or world cities, although inner suburban shrinkage has gradually been paid attention over recent decades (e.g. Audirac et al., 2012; Couch et al., 2004; Hanlon, 2008; Lucy and Philips, 2000; Randolph and Freestone, 2011; Vicino, 2008; Vicino, Hanlon and Short, 2007; Wiechmann and Pallagst, 2012). However, suburban politics and governance have been less examined (e.g. Ekers, Hamel and Keil, 2015; Young, 2015; Phelps, 2015), especially under suburban shrinkage. Simultaneously, there is an increasing need to promote overarching conceptual and theoretical debates from an international comparative perspective (Phelps and Wu, 2011). In this situation, Tokyo's outer suburban shrinkage would be conceived as one of the global frontiers of post-suburban phenomena that would be possibly incorporated into Phelps and Wu (2011)'s framework. By integrating suburban politics and governance issues into their framework, it is significant to explore underlying political and policy dynamics embedded in recent Tokyo's suburban restructuring. This would contribute to both the debates of post-suburban transformations and shrinking cities, including relevant conceptual and theoretical developments. Thus, given the continued maturing processes of post-suburban spaces worldwide, policy and planning implications drawn from Tokyo's case would be significant for the future challenges of the global urbanism.

## Chapter 3

### Research Area, Significance of Research and Research Questions

#### 3.1 Chapter Introduction

This chapter explains the following subjects: 1) a target area as Tokyo's suburban territory to be explored in this research, 2) current issues and problems surrounding Tokyo's suburban territory, and 3) the significance of research and research questions. Firstly, it details the economic and socio-demographic positioning of Tokyo's suburban territory within international and domestic contexts. Then, it provides a brief explanation of current situations surrounding Tokyo's suburban territory. Considering these, the research questions are detailed by being broken down into sub-questions to provide more clarifications about how to explore Tokyo's suburban restructuring. Thus, taking account of the literature review in Chapter 2, the significance of research is more precisely articulated from the perspective of the following three features, namely: 1) the overall tempo-spatial phenomenon, 2) the multifaceted nature of change, and 3) path-dependent processes.

#### 3.2 Research Area: Tama Area as Tokyo's Suburban Territory

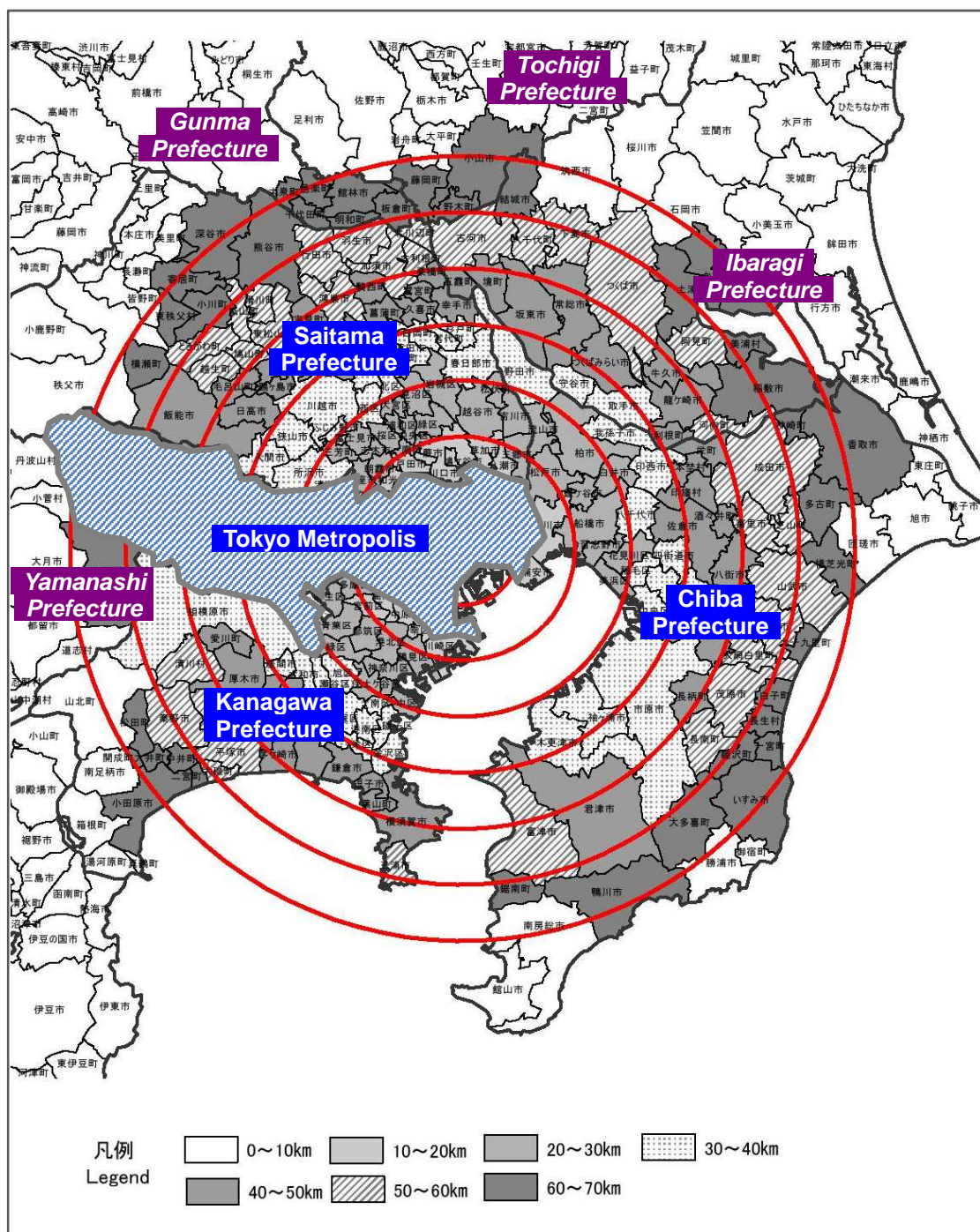
The target area to be explored in this research is Tokyo's suburban territory, officially called the Tama Area, which is located in the western part of Tokyo Metropolis.<sup>1</sup> As depicted in Figure 3-1, Tokyo Metropolis is the most important prefecture of the Greater Tokyo Area, consisting of 23 special wards, 30 suburban municipalities in the mainland and 9 local municipalities in islands. In this research, the Greater Tokyo Area is referred to as a spatial terrain consisting of Tokyo Metropolis (central and west-side), Kanagawa Prefecture (south-side), Chiba Prefecture (east-side), and Saitama Prefecture (north-side).<sup>2</sup> The National Capital Region, which is stipulated by the Order for Enforcement of the National Capital Region Development Act of 1956, is referred to as a spatial terrain covered by the Greater Tokyo Area and other adjoining prefectures, namely Yamanashi Prefecture (farther west-side), Ibaragi Prefecture (farther

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<sup>1</sup> Historically, Tokyo Metropolis was created through a merger between Tokyo Prefecture (Tokyo-fu) and Tokyo City (Tokyo-shi) at the implementation timing of the metropolitan governance system in 1943. Tokyo Prefecture was an administrative entity that existed during 1868 to 1943, which was designated as one of the three prefectures, together with Kyoto Prefecture and Osaka Prefecture, at the timing of the abolition of feudal domains and establishment of prefectures (called the Haihan-chiken) in 1871. Tokyo City which existed during 1889 to 1943 was established within Tokyo Prefecture through the implementation of the system of cities, towns and villages in 1889. Tokyo City almost corresponded to the current Special Ward Area.

<sup>2</sup> Some documents use the term of the Greater Tokyo Area in different ways. This research follows the definition by TMG. For details, see the following website: [www.metro.tokyo.jp/ENGLISH/ABOUT/HISTORY/history02.htm](http://www.metro.tokyo.jp/ENGLISH/ABOUT/HISTORY/history02.htm) [last accessed on 2 December 2017].

northeast-side), Tochigi Prefecture (farther north-side), and Gunma Prefecture (farther northwest-side). From the viewpoint of public administration, Japan has a three-tier governmental system of national, prefectural and municipal levels. TMG is a prefectural government that administers Tokyo Metropolis. There is no single government entity to govern the Greater Tokyo Area or National Capital Region.



Source: Adapted from the Statistics Bureau, MIAC ([www.stat.go.jp/data/e-census/2009/kakuho/pdf/tokyo\\_k.pdf](http://www.stat.go.jp/data/e-census/2009/kakuho/pdf/tokyo_k.pdf))

Figure 3-1 Location of Tokyo Metropolis within National Capital Region

As of 2017, Tokyo's suburban territory constitutes 30 suburban municipalities, which are legally classified into 26 cities, 3 towns and 1 village under the Local Autonomy Act of 1947. This classification primarily depends on population size. This research refers to the Tama Area as Tokyo's suburban territory in the form of being contrasted with the Special Ward Area as Tokyo's urban territory. In this research, special wards are referred to as urban municipalities, and the three wards of Chiyoda Ward, Minato Ward and Chuo Ward, which are located in the centre of the Greater Tokyo Area, are referred to as the metropolitan city centre.

In reality, it is difficult to define suburban spaces within the spatial terrain of Tokyo Metropolis, as suggested by international debates worldwide (e.g. Forsyth, 2012). There is no official classification standard in Japan to distinguish between urban and suburban spaces within Tokyo Metropolis. However, from the standpoint of public administration, Tokyo Metropolis is divided into two different political and administrative areas of the Special Ward Area and the Tama Area. Special ward governments within the Special Ward Area are legitimated as special local governments and municipal governments within the Tama Area are as ordinary local governments under the Local Autonomy Act of 1947. The scope of public affairs of special local governments is narrower than that of ordinary local governments. For instance, according to the Council of Local Authorities for International Relations (CLAIR) (2010), part of public services within the Special Ward Area, such as firefighting, water supply and sewage treatment, are handled by TMG. Moreover, there exists a fiscal redistribution system within the Special Ward Area, which is not applied to the Tama Area. In this system, TMG directly collects some taxes, such as fixed asset tax, and redistribute them to reduce fiscal inequalities among special local governments. Considering these differences in the public administration system, this research refers to the Tama Area as Tokyo's suburban territory.

This research specifically targets Tokyo's suburban territory, rather than the entire suburban space of the Greater Tokyo Area or National Capital Region. This targeting enables us to more deeply investigate the complexity of Tokyo's suburban restructuring, paying much attention to the role and function of TMG as a middle-level, prefectural governmental entity. Most research which targets the (sub)urban shrinkage of the Greater Tokyo Area or National Capital Region tends not to attention this aspect, putting a focus mainly on national-level policies. Inter-governmental dynamics, as well as inter-sectoral dynamics, is one of key aspects to be addressed for an understanding of Tokyo's suburban restructuring, because TMG is a very powerful, influential entity. Besides, most research which targets the Greater Tokyo Area or National Capital Region tends to focus on very specific research agendas such as housing phenomena (e.g. Kubo, 2015) or office restructuring (e.g. H. Sato, 2010, 2016), rather than exploring the interactions among political and administrative, economic and socio-demographic dimensions. Therefore, this research specifically targets Tokyo's suburban territory to deeply investigate the complexity of its restructuring from the perspective of both the three P's and three I's.

Tokyo's suburban territory has a prominent feature within Tokyo Metropolis and the Greater Tokyo Area. The current socio-demographic and economic positioning of Tokyo's suburban territory within the wider context is shown in Table 3-1. As of 2015, it has a population of approximately 4.2 million, accounting for about 31.2 percent of the population of Tokyo Metropolis. The population of Tokyo's suburban territory is considerably large, being comparable in population to some large urban agglomerations worldwide such as Seattle, Rome, Montreal, Busan, and Detroit. During 2010 to 2015, the annual population growth rate of Tokyo's suburban territory is 0.1 percent against 0.7 percent for the urban territory. However, some suburban municipalities have already experienced population decline. Thus, as of 2014, Tokyo's suburban territory has an employment of 1.6 million, accounting for about 16.3 percent of the employment of Tokyo Metropolis. During 2009 to 2014, the annual employment growth rate of Tokyo's suburban territory is -0.4 percent against 0.4 percent for the urban territory. Therefore, suburban economic shrinkage is more observable in these numerical evidences. In fact, the annual manufacturing production (value of shipments) within Tokyo's suburban territory has declined by about 40 percent, and the number of establishments in the manufacturing sector has decreased by about 30 percent during 2001 to 2011 (TMG, 2013). One photograph of Tokyo's suburban territory alongside the Chuo Line of East Japan Railway Company (JR East), which is the main backbone railway line, is presented in Figure 3-2, and another photograph taken from Mt. Takao in Hachioji City, which is located on the edge of Tokyo's suburban territory, is in Figure 3-3.

Table 3-1 Positioning of Tokyo's Suburban Territory within Wider Context

	Population (2015)	Employment (workplace) (2014)
Japan (A)	127,094,745	61,788,853
Annual Growth Rate	-0.2%	-0.3%
Greater Tokyo Area (B)	36,130,685	18,425,443
Share to Japan (B/A)	28.4%	29.8%
Annual Growth Rate	0.3%	0.1%
Tokyo Metropolis (C)	13,515,271	9,657,306
Share to Greater Tokyo Area (C/B)	37.41%	52.41%
Annual Growth Rate	0.54%	0.29%
Urban Territory (Special Ward Area) (D)	9,272,740	8,066,791
Share to Tokyo Metropolis (D/C)	68.6%	83.5%
Annual Growth Rate	0.7%	0.4%
Suburban Territory (Tama Area) (E)	4,216,040	1,577,082
Share to Tokyo Metropolis (E/C)	31.2%	16.3%
Annual Growth Rate	0.1%	-0.3%

Note: The annual growth rates of population are calculated during 2010 to 2015, and those of employment (workplace) are during 2009 to 2014.

Source: Author's own, prepared with use of the 2010 and 2015 Population Censuses and the 2009 and 2014 Economic Censuses





Source: Chiikisōgōkenkyūjo (ed.) (1989)

Figure 3-2 Tokyo's Suburban Territory alongside JR Chuo Line



Source: Geomedian ([http://komekami.sakura.ne.jp/wp-content/uploads/DSC\\_0926.jpg](http://komekami.sakura.ne.jp/wp-content/uploads/DSC_0926.jpg))

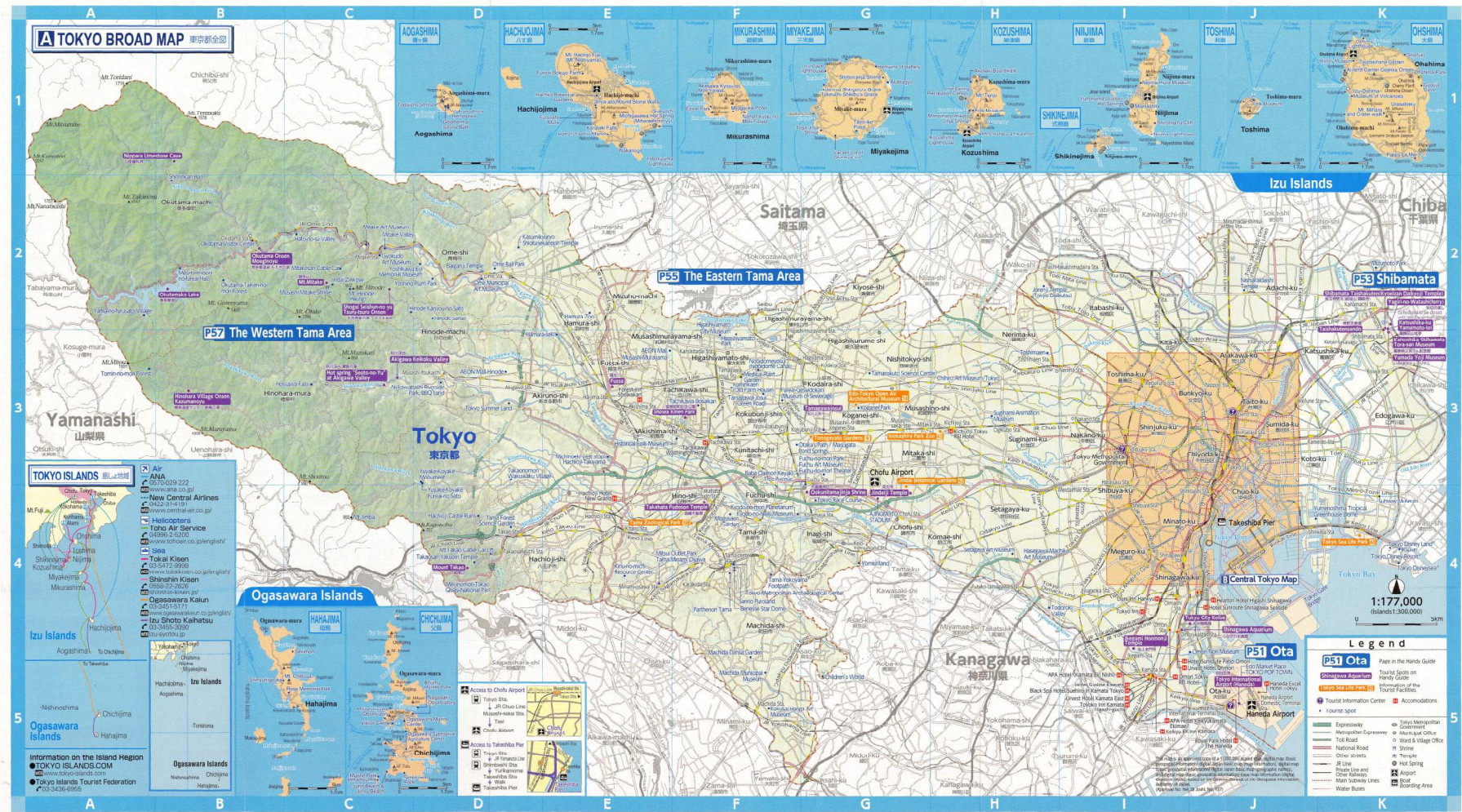
Figure 3-3 Tokyo's Suburban Territory Viewed from Mt. Takao in Hachioji City

30 suburban municipalities of Tokyo's suburban territory are varied in geographical location, administrative area, population and employment (workplace) (see Figure 3-4 and Table 3-2). Geographically, Tokyo's suburban territory stretches from 20 to 70 kilometres from the centre of the Greater Tokyo Area, namely Tokyo Station located in Chiyoda Ward, being sustained by the extensive network of railways and roads (see Figure 3-5). Densely populated areas within Tokyo's suburban territory can be observed between 20 to 50 kilometres. This research divides Tokyo's suburban territory into inner suburban, outer suburban and peri-suburban territories. Roughly, suburban municipalities located from about 10 to 30 kilometres are referred to as inner suburban municipalities, those from about 30 to 50 kilometres as outer suburban municipalities, and those from about 50 to 70 kilometres as peri-suburban municipalities. A few suburban municipalities, namely Tama City and Kunitachi City, which are located at a little less than 30 kilometres, are classified into outer suburban municipalities, primarily because they are located beyond an unrealised greenbelt. Due to the past administrative jurisdiction, 30 suburban municipalities are classified into the following three sub-regions; the Northern Tama Area (Kita-tama), Southern Tama Area (Minami-tama) and Western Tama Area (Nishi-tama). However, nowadays, this classification does not have much legal meanings. Thus, from the viewpoint of spatial coverage, Tokyo Metropolis has a relatively linear shape of the administrative area stretching from the metropolitan city centre to the western fringe of the Greater Tokyo Area. This linear shape enables us to explore Tokyo's suburban restructuring under the singular prefectural government of TMG from the perspective of both urban-suburban and inner suburban-outer suburban dynamics.



Figure 3-4 Tokyo's Suburban Territory: Administrative Units of Tokyo Metropolis in Mainland





Source: Tokyo Convention & Visitors Bureau

Figure 3-5 Tokyo's Suburban Territory and Transport Networks

Table 3-2 Suburban Municipalities of Tokyo Metropolis

No.	Geographical Location	Name of Suburban Municipalities	Distance from Metropolitan City Centre	Sub-region	Population (2015)	Employment (2014)	Pop. Density (pers/ ha)	Emp. Density (pers/ ha)	Area (ha)
1	Inner Suburban Territory	Komae City	17.7	Northern	80,249	16,838	125.6	26.4	639
2		Musashino City	18.5	Northern	144,730	87,949	131.8	80.1	1,098
3		Mitaka City	18.7	Northern	186,936	61,109	113.8	37.2	1,642
4		Chofu City	20.7	Northern	229,061	78,827	106.1	36.5	2,158
5		Nishitokyo City	21.2	Northern	200,012	52,016	127.0	33.0	1,575
6		Higashikurume City	23.0	Northern	116,632	30,758	90.6	23.9	1,288
7		Koganei City	23.9	Northern	121,396	30,955	107.4	27.4	1,130
8		Inagi City	24.1	Southern	87,636	24,299	48.8	13.5	1,797
9		Kiyose City	24.6	Northern	74,864	20,076	73.2	19.6	1,023
10		Fuchu City	26.1	Northern	260,274	118,033	88.4	40.1	2,943
11		Kodaira City	26.6	Northern	190,005	62,094	92.6	30.3	2,051
12		Kokubunji City	27.6	Northern	122,742	37,146	107.1	32.4	1,146
13		Higashimurayama City	28.1	Northern	149,956	41,358	87.5	24.1	1,714
14	Outer Suburban Territory	Tama City	29.4	Southern	146,631	65,632	69.8	31.2	2,101
15		Kunitachi City	29.4	Northern	73,655	28,784	90.4	35.3	815
16		Higashiyamato City	31.5	Northern	85,157	24,973	63.5	18.6	1,342
17		Tachikawa City	32.6	Northern	176,295	119,144	72.4	48.9	2,436
18		Machida City	33.2	Southern	432,348	143,349	60.2	20.0	7,180
19		Hino City	33.6	Southern	186,283	61,188	67.6	22.2	2,755
20		Musashimurayama City	35.2	Northern	71,229	27,242	46.5	17.8	1,532
21		Akishima City	37.4	Northern	111,539	51,066	64.3	29.4	1,734
22		Mizuho Town	38.6	Western	33,445	22,032	19.8	13.1	1,685
23		Fussa City	40.2	Western	58,395	19,748	57.5	19.4	1,016
24		Hachioji City	40.7	Southern	577,513	231,984	31.0	12.4	18,638
25		Hamura City	42.2	Western	55,833	27,018	56.4	27.3	990
26		Akiruno City	43.0	Western	80,954	24,907	11.0	3.4	7,347
27		Ome City	45.9	Western	137,381	55,506	13.3	5.4	10,331
28		Hinode Town	46.5	Western	17,446	9,674	6.2	3.4	2,807
29	Peri-suburban Territory	Hinohara Village	56.0	Western	2,209	962	0.2	0.1	10,541
30		Okutama Town	62.2	Western	5,234	2,415	0.2	0.1	22,553
Total			-	-	4,216,040	1,577,082	36.3	13.6	116,007

Source: Author's own, prepared with use of the 2015 Population Census and the 2014 Economic Census

### 3.3 Current Issues and Problems Surrounding Tokyo's Suburban Territory

Current issues and problems surrounding Tokyo's suburban territory can briefly be explained from the following aspects: 1) Tokyo's fastest rate and earlier timing of population aging among large metropolises worldwide, 2) the strong back-to-the-city movement of workplace and residence, and 3) the anticipated shrinkage of Tokyo's suburban territory, especially within the outer suburban space. Recently, Tokyo Metropolis has experienced population aging at the fastest rate and earlier timing than other large metropolises such as New York, London and Paris (Rodwin, Gasmano and Butler, 2006). According to the World Bank Database, the National Capital Region (described as Tokyo in the database) is the largest urban agglomeration in the world with a population of about 37.8 thousand as of 2014, as shown in Table 3-3.<sup>3</sup> Remarkably, it has the highest share of elderly population aged 65 and above. In this respect, Matsutani (2010) alights on the fast pace of population aging, suggesting that Japan has the highest share of elderly population among advanced nations in the late 1990s, notwithstanding the lowest share in the 1980s. While large urban agglomerations in developing countries have been growing rapidly over recent decades, most of those have gradually showed symptoms of stagnation at the matured phase of urbanisation, possibly facing similar phenomena to the National Capital Region in the future.

Table 3-3 International Positioning of National Capital Region

Metropolis		Urbanisation			Income	Population aging
		Population (million) (2014)	Population annual growth rate (%) (2010-2014)	Urban population (%) (2014)	Gross Domestic Product per capita (constant 2010 US\$) (2014)	Population aged 65 and above (%) (2014)
Developed Countries	Tokyo (National Capital Region)	37.8	0.7	93.0	46,484	25.4
	New York	18.6	0.3	81.4	50,881	14.3
	London	10.2	1.2	82.3	40,909	17.9
	Paris	10.8	0.7	79.3	41,431	18.5
Developing Countries	Delhi	25.0	3.3	32.4	1,647	5.5
	Shanghai	23.0	3.6	54.4	6,108	9.3
	Mexico City	20.8	0.9	79.0	9,493	6.3
	Sao Paulo	20.8	1.5	85.4	11,866	7.7

Source: Author's own, prepared from the World Bank Database (<http://data.worldbank.org/>)

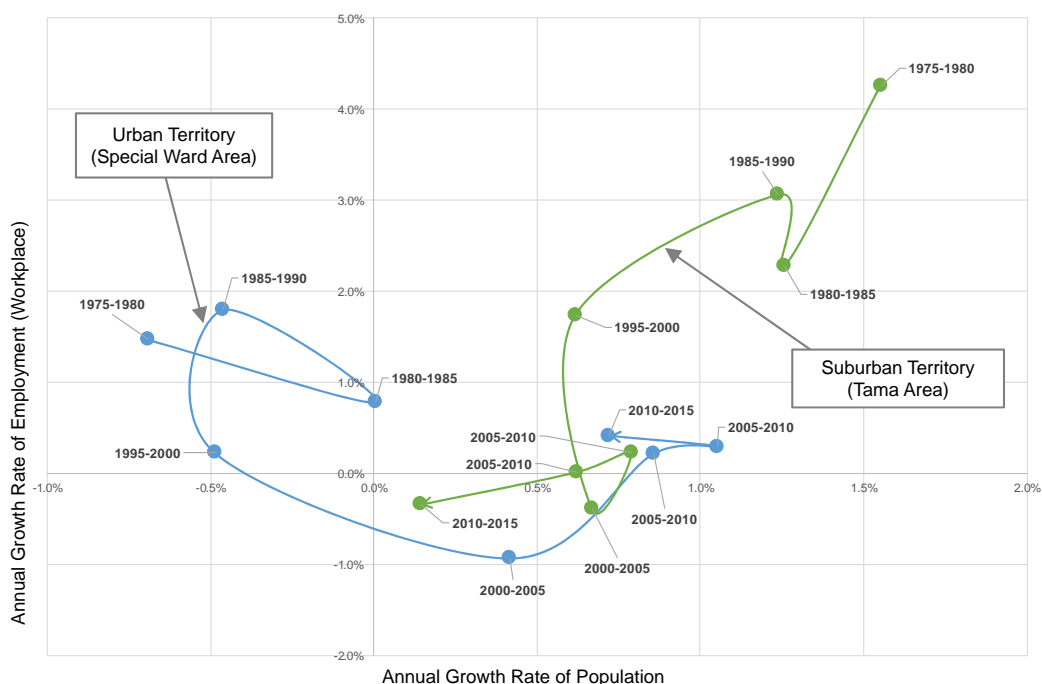
In this situation, TMG (2017) predicts that the population of Tokyo Metropolis will start to decrease after the peak year of 2020 with a population of about 14.0 million. As a whole, Japan has already entered a phase of population decline after reaching a peak population of approximately 127.8 million in 2004. According to Masuda (2014), the total fertility rate recorded

<sup>3</sup> Since the definition of the National Capital Region in this research would be slightly different from that in the World Bank Database, the population used in this research would be not identical to that in the database.



the lowest rate of 1.26 in 2005, continually dropping from 4.32 in the first baby boom during 1947 to 1949. Regardless of a slight recovery to 1.43 in 2013, it is still much lower than replacement level fertility, namely 2.07 for Japan (Masuda, 2014). According to the medium scenario of population estimates by the National Institute of Population and Social Security Research (IPSS) (2017), the population of Japan will continue to decrease from about 127.1 million (as of 2015) to reach about 110.9 million in 2040 and about 88.1 million in 2065. The ratio of elderly population will continue to increase from 26.6 percent (as of 2015) to reach 33.3 percent in 2036 and 38.4 percent in 2065 (IPSS, 2017). In this situation, the future shrinkage of Tokyo Metropolis would be inevitable.

The strong back-to-the-city movement of workplace and residence has been taking place mainly since the early 2000s. Its coincidence with the overall suburban stagnation and/or decline has magnified the pace and magnitude of Tokyo's suburban shrinkage. Figure 3-6 illustrates the past trajectories of the annual growth rates of population and employment for Tokyo's urban and suburban territories. In this figure, the x-axis denotes the annual growth rates of population, and the y-axis denotes those of employment (workplace). Obviously, Tokyo's suburban territory (denoted by the green line) has gradually decreased the momentum of growth in contrast to the revival of the urban territory (denoted by the blue line), especially after entering the 2000s.



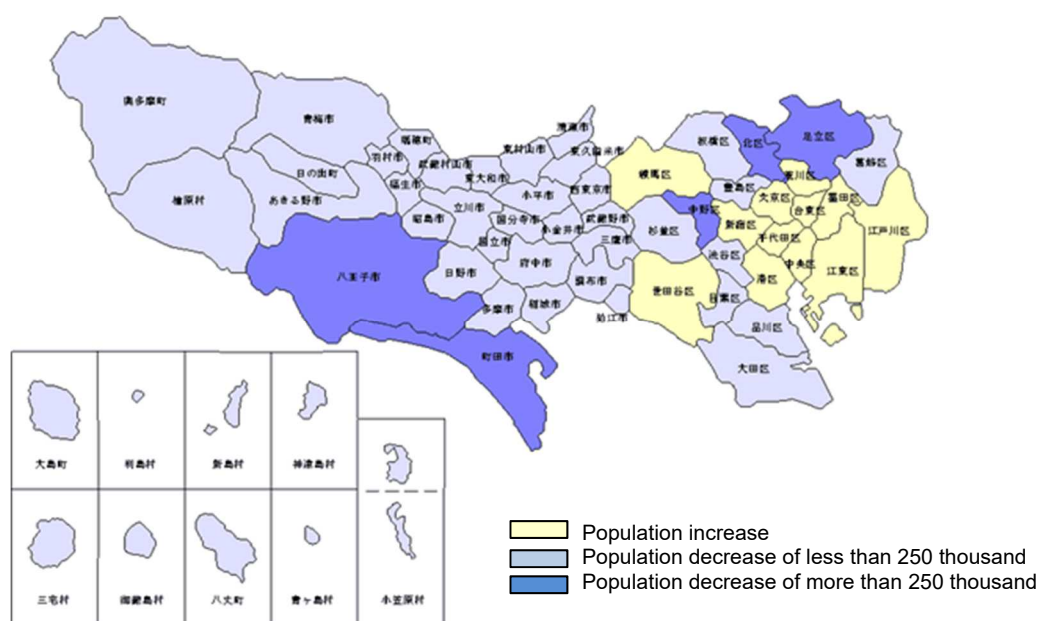
Note: For the annual growth rates of employment (workplace), there is a discontinuity during 2006 to 2009 owing to changes in the survey methodologies from the 2006 Establishment and Enterprise Census to the 2009 Economic Census. Therefore, this discontinuity is adjusted with use of weighted averages.

Source: Author's own, prepared with use of the Population Censuses, Establishment and Employment Surveys and Economic Censuses

Figure 3-6 Trajectories of Annual Growth Rates of Urban and Suburban Population and Employment (Workplace)

From a domestic perspective, the back-to-the-city movement has more strongly emerged in the Greater Tokyo Area, compared with the Osaka and Nagoya metropolitan areas (MLIT, 2006). Tokyo Metropolis as the capital city of Japan is entirely different from other domestic metropolises in terms of size, function and change. Tokyo Metropolis has the largest population with other domestic metropolises far behind, as witnessed by the fact that it does not entirely follow Zipf's rank-size rule.<sup>4</sup> Since the command-and-control functions of public and private sectors, such as GOJ, TMG and enterprise headquarters, have been polarised in Tokyo Metropolis, its metropolitan city centre has possessed much stronger magnetic powers, compared with those of the Osaka and Nagoya metropolitan areas.

Under these circumstances, Tokyo's suburban territory is predicted to face population decline after the peak year of 2020 with a population of about 4.3 million, being ahead of the urban territory predicted to have the peak year of 2030 with a population of about 9.8 million (TMG, 2017). All suburban municipalities are predicted to experience population decline before 2032, as depicted in Figure 3-7 (TMG, 2012).<sup>5</sup> Outer suburban municipalities are anticipated to experience more remarkable population decline than inner suburban municipalities.



Source: TMG (2012) ([www.metro.tokyo.jp/INET/CHOUSA/2012/03/60m3t200.htm](http://www.metro.tokyo.jp/INET/CHOUSA/2012/03/60m3t200.htm))

Figure 3-7 Population Projection for Administrative Units of Tokyo Metropolis

<sup>4</sup> For Zipf's rank-size rule, see Kuroda, Tabuchi and Nakamura (2008) and O'Sullivan (2012).

<sup>5</sup> Figure 3-6 shows TMG's population projection as of 2012.



### 3.4 Research Questions and Significance of Research

Tokyo's suburban restructuring can be conceived as one of the global frontiers of suburban phenomena worldwide, as discussed in Chapter 2. Recent Tokyo's suburban restructuring has been materialised under the new planning regime accrued by a political and policy paradigm shift within the contextual transition from growth to shrinkage. This regime has been created by the interplay of international and domestic forces. From a theoretical perspective, Birkland (2010) suggests that there are the following four policy environments of a policy-making system: structural, social, economic and political environments.<sup>6</sup> These policy environments interactively shape the overall policy environment, in which urban policies are actually formulated and implemented. In this research, the structural and political environments are together referred to as the political and administrative environment. Thus, these policy environments are closely linked with both international and domestic forces. Yet, in simple terms, the following can be considered in the case of Japan; international forces are more strongly associated with the economic environment, and domestic forces have more strongly associated with the socio-demographic environment. This is partly because Japan does not receive many immigrants. Then, changes in the economic and socio-demographic environments have gradually altered the political and administrative environment of the policy-making system.

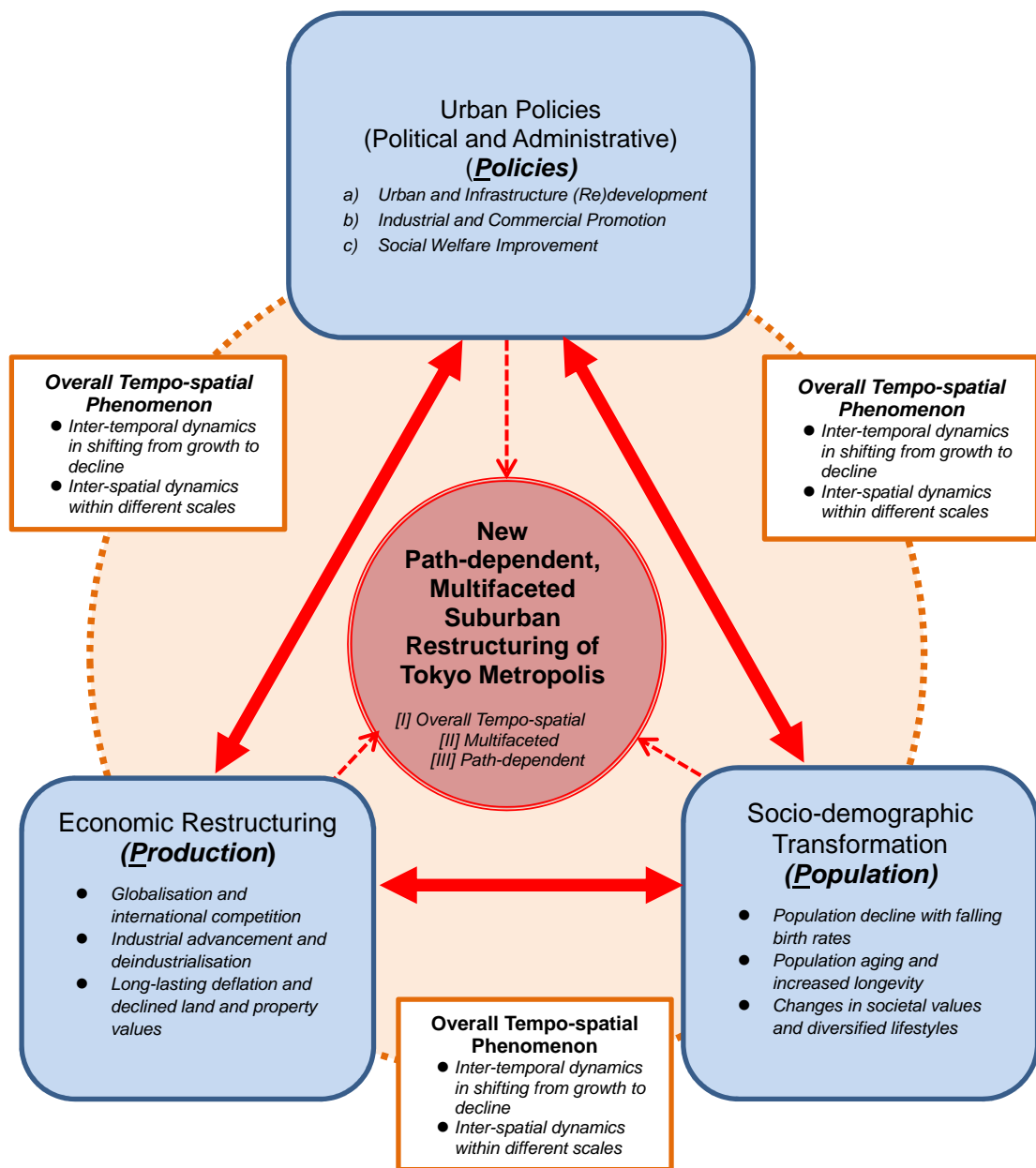
Keeping these in mind, it is essential to recognise that Tokyo's suburban restructuring is an overall tempo-spatial phenomenon that is multifaceted and path-dependent. It has been created in the context of synchronised, or all-at-once, concerns of all the political and administrative, economic, and socio-demographic aspects, which have been influenced by the interplay of international and domestic forces. Firstly, political and administrative aspects include the increased importance of strengthening global competitiveness, increased necessity of structural reforms through deregulation and privatisation, uprising of the social welfare regime, tightened policy constraints under accumulated fiscal debts and amplified social welfare expenditures, and progressive decentralisation under increasingly emphasised democratic advocacy. Secondly, economic aspects include economic stagnation and shrinking domestic markets, growing transnational companies and their internationally expanded markets under improved institutional systems of international trades, industrial advancement with growing high-order service industries, increased highly-specialised professionals under the knowledge economy, and the transnational restructuring of production systems under deindustrialisation, technological advances such as ICTs, changes in consumption behaviours, and the depreciation of land and property values. Finally, socio-demographic aspects include population decline with diminished fertility rates, rapid population aging with increased life expectancy, growing social segregation and widened income disparities, diversified lifestyles such as work-life balance, and changes in

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<sup>6</sup> According to Birkland (2010), the structural environment includes constitutional frameworks, legal structures and procedural systems; the social environment includes demographic conditions such as age, race, gender, and social structure; the economic environment includes economic and industrial conditions; the political environment includes public interests and concerns of political interest groups (Birkland, 2010).

societal values such as women's participation in society. This coincidence of political and administrative, economic, and socio-demographic aspects has interactively created the complexity of Tokyo's suburban restructuring. Therefore, this research makes the best efforts to capture this path-dependent, multifaceted tempo-spatial phenomenon, whilst all the aspects above cannot be addressed.

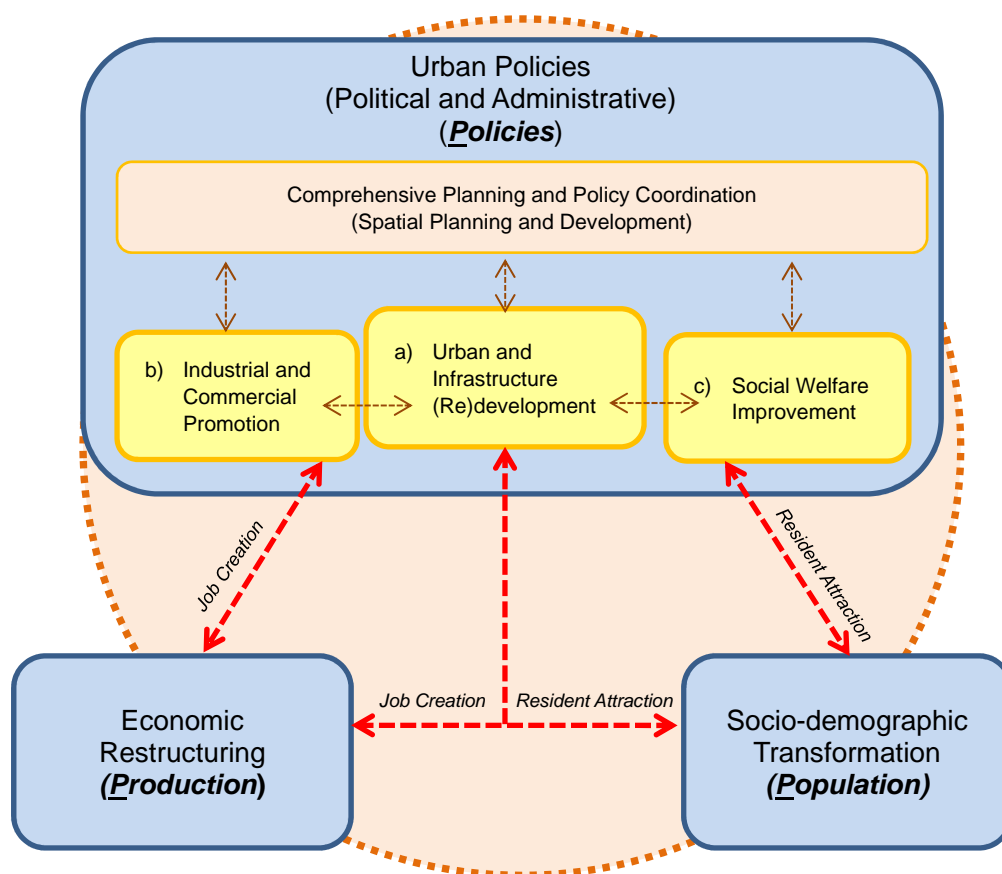
Considering these, this research sets up the three P's analytical framework consisting of A) urban policies (political and administrative - fiscal) (Policies), B) economic restructuring (Production), and C) socio-demographic transformation (Population), as diagrammed in Figure 3-8. As for urban policies, the following three policy domains are addressed, namely: a) urban and infrastructure (re)development, b) industrial and commercial promotion, and c) social welfare improvement, all of which are important for suburban planning and development. Because each of these urban policies are separately administered by relevant specific administrative divisions under the three-tier governmental system of Japan, these urban policies have been formulated and implemented by incorporating specific inter-governmental and inter-sector dynamics. Then, considering that Tokyo's suburban restructuring has been materialised as an overall tempo-spatial phenomenon by the interactions within the three P's, these interactions are referred to as the main part of the multifaceted feature. This multifaceted feature internalises the path-dependent feature accrued within the contextual transition from growth to shrinkage. Yet, the path-dependent feature is separately emphasised because of its importance as one of key aspects of Tokyo's suburban restructuring.



Source: Author's own

Figure 3-8 Three P's Analytical Framework:  
Interactions among Urban Policies, Economic Restructuring and  
Socio-demographic Transformation

The three policy domains are closely linked with economic and socio-demographic transformations. Figure 3-9 conceptualises the relationship of the targeted urban policies (Policies) to the other analytical dimensions of economic restructuring (Production) and socio-demographic transformation (Population). All the urban policies are related to both economic and socio-demographic transformations. However, in simple terms, the urban and infrastructure (re)development policy is related to both dimensions of economic restructuring and socio-demographic transformation, since it can contribute to both production increase (job creation) and population increase (resident attraction). The industrial and commercial promotion policy is more strongly related to the dimension of economic restructuring through production increase (job creation), and social welfare improvement policy is more strongly related to the dimension of socio-demographic transformation through population increase (resident attraction). In recent decades, these three policy domains have been increasingly adjusted through comprehensive planning and policy coordination under limited fiscal conditions.



Source: Author's own

Figure 3-9 Simplified Relationship of Targeted Urban Policies with Economic Restructuring and Socio-demographic Transformation

Keeping these in mind, this research addresses the following three research questions. Here, each research question is divided into constituent sub-questions to illuminate clearer viewpoints.

**1) What transformations have existed in recent Tokyo's suburban restructuring?**

- (1-1) What growth and/or decline types of suburban municipalities (short-term development paths) have been shaped in each time period of '1975 to 1995' in the growth context and '1995 to 2015' in the stagnation and/or decline context? What different trajectories of suburban municipalities (long-term development paths) have been shaped?
- (1-2) How have these short- and long-term suburban transformations been affected by their geographical locations and past development paths? How have the contextual transition from growth to shrinkage affected these different trajectories?

**2) How have urban policies under the three-tier governmental system of Japan influenced recent Tokyo's suburban restructuring?**

- (2-1) How have urban policies been formulated and implemented by different tiers of government and what kinds of political and policy dynamics have existed? How have upper-level governmental entities responded to international and domestic forces? How have municipal governments tackled suburban shrinkage while responding to the urban policies of upper-level governmental entities? What differences in political and policy dynamics among municipal governments have been accrued in their different trajectories?
- (2-2) How have urban policies affected the non-governmental actors of private and community sectors? How have economic actors of global and local enterprises responded to the recent conditions of shrinkage? How non-economic (or social) actors of local communities responded to these conditions?

**3) What policy and planning implications can be drawn for Tokyo Metropolis and other large metropolises? What conceptual and theoretical contributions can be made to contemporary suburban debates on the basis of Tokyo's case?**

- (3-1) What kinds of planning policies and public interventions at different tiers of government should be achieved for the future suburban sustainability and regeneration of Tokyo Metropolis?
- (3-2) How can lessons learnt from Tokyo's case be applied to other large metropolises in advanced nations and/or rapidly growing large cities in the Asia region, which might confront similar suburban shrinkage in the future?
- (3-3) What theoretical and conceptual contributions to contemporary suburban debates can be made on the basis of Tokyo's case, especially for suburban transformations in the context of shrinkage?

The significance of this research can be explicitly articulated from the following three specific features, namely: I) the overall tempo-spatial phenomenon: declining outer suburban cities within the polycentric metropolitan structure, II) the multifaceted nature of change: interactions of urban policies with economic and socio-demographic transformations with attention to underlying political and policy dynamics, and III) path-dependent processes: evolutionary influences of the paradigm shift within the contextual transition from growth to shrinkage. Whilst these 'overall tempo-spatial', 'multifaceted' and 'path-dependent' features are interrelated, this division into these three features is useful to provide detailed explanations about the significance of this research.

#### **I) Overall tempo-spatial phenomenon: declining outer suburban cities within the polycentric metropolitan structure**

There is little research that has investigated declining outer suburban cities, especially for world or global cities with polycentric metropolitan structures. Here, key aspects are as follows: 1) outer suburban shrinkage, 2) primary cities of the world urban hierarchy, and 3) polycentricity. Outer suburban shrinkage has not yet been observed in large metropolises that have still been growing to a greater or lesser extent. Some urban scholars and commentators have investigated inner suburban shrinkage paralleled with outer suburban growth and/or the revival of central cities (e.g. Beauregard, 1994, 2012; Fol, 2012; Hanlon, Short and Vicino, 2009; Lucy and Philips, 1997, 2000; Randolph and Freestone, 2011; Vicino, 2008; Vicino, Hanlon and Short, 2007). However, outer suburban shrinking processes have been less examined especially in international debates. From another viewpoint, there has increased research on shrinking cities (e.g. Audirac et al., 2012; Buhnik, 2014, 2017; Cunningham-Sabot et al., 2014; Hattori, Kaido and Matsuyuki, 2017; Mallach, Hasse and Hattori, 2017; Martinez-Fernandez et al., 2016; Wiechmann and Pallagst, 2012; Yahagi, 2009). However, comparatively, shrinking processes have been less examined for global or world cities, because urban shrinkage in US and European cities are mostly associated with secondary or tertiary city-regions that tend to be more seriously affected by inter-regional competition often coupled with inter-territorial industrial restructuring. Tokyo Metropolis as one of the primary cities of the world urban hierarchy has quite different features from these secondary or tertiary city-regions in political and administrative, economic and socio-demographic terms. Simultaneously, from a domestic viewpoint, the suburban territory of Tokyo Metropolis as the capital city is quite different from those of other shrinking city-regions outside of the Greater Tokyo Area. Besides, the extent of polycentricity for these secondary or tertiary city-regions is not strong, compared with Tokyo Metropolis. Therefore, outer suburban shrinkage within the spatial context of polycentricity has been less explored, especially for global or world cities.

In this vein, Tokyo's suburban territory has already entered the phase of stagnation and/or decline earlier than those of other world or global cities. Now, the outer suburban territory has

experienced radical restructuring, in which some outer suburban cities have already showed symptoms of decline. Consequently, Tokyo's polycentric structure has been deforming under specific metropolitan dynamics, especially within the outer suburban territory. This sort of outer suburban shrinkage might be observed in other large metropolises in the future. Therefore, this research can provide significant insights about the declining processes of the outer suburban cities of primary, polycentric metropolises.

## **II) Multifaceted nature of change: interactions of urban policies with economic and socio-demographic transformations with attention to underlying political and policy dynamics**

There is little research that has explored suburban restructuring with a view to the interactions of urban policies with economic and socio-demographic transformations, especially paying attention to underlying political and policy dynamics. Overall, underlying political and policy dynamics associated suburban spaces in both growth and shrinkage periods have been less examined (e.g. Ekers, Hamel and Keil, 2015; Phelps, 2015; Young, 2015). Especially, even though the necessity to explore underlying mechanisms in shrinking cities has been increasingly recognised (e.g. Großmann et al., 2013; Mallach et al., 2017; Kamo, 2016), underlying political and policy dynamics related to suburban shrinkage have been less explored, especially at the local level. Urban policies are key elements when exploring Tokyo's suburban restructuring. From an international comparative perspective, Japan is regarded as a “developmental, or plan-rational, state” with stronger governmental interventions into the market, which is contrasted with a “regulatory, or market-rational, state” of the US (Johnson, 1982: 19). Although Japan has gradually shifted from a “developmental” state to a “regulatory” state (Nakamura, 2011: 932), the role of the government sector has still been dominant, especially in the field of urban policies and planning. However, even the domestic literature does not address the interactions among political and administrative, economic and socio-demographic arenas in suburban transformations, focusing on socio-demographic, economic and/or fiscal aspects without much attention to the influences of urban policies and underlying political and policy dynamics (e.g. Iijima, 2016; Imahashi, 2004; Ishikawa, 1999, 2008; ITMR, 2011; Koizumi, 2010; Kubo, 2015; Oki, 2011; Miura, 1995, 2011, 2012, 2017; H. Sato, 2010, 2016; Shimizu, 2007; Song and Deguchi, 2013; Sugawara and Eto, 1995; Wakabayashi, 2007; Yamaoka and Goto, 2011; M. Yoshida, 1995; M. Yoshida, 1995; T. Yoshida, 2010; Yoneda, 2016). Whilst suburban shrinkage in either the Greater Tokyo Area or National Capital Region has been gradually paid attention (e.g. Kubo, 2015; Miura, 2012, 2017; T. Yoshida, 2010), there is little research that has explored these interactions within Tokyo's suburban territory embodying specific political and policy dynamics, which have strongly been influenced by the thoughts and actions of TMG.

Moreover, this research explores inter-sectoral dynamics among different policy domains, not only inter-governmental dynamics. In the extant literature, inter-sectoral dynamics have been less examined, while being the key aspect especially under suburban shrinkage. It is important to be addressed especially in the context of the sectionalised political and administrative system of Japan. Nowadays, inter-sectoral dynamics are relevant even to municipal governments. A total of municipal tax revenues for Tokyo's suburban territory has begun to decline after its peak in 2007 (TMG, 2013). In this situation, municipal governments have faced the increased necessity to consider how to balance these three policy domains (Ichizyo, 2013). Besides, municipal governments have differentiated their responses and actions, depending on the different trajectories of their cities, which have affected local economic and/or non-economic (or social) actors. In this situation, although local affairs are important to be addressed (e.g. Young, 2015; Tomaney, 2017), local responses and actions under suburban shrinkage have been less examined. In this vein, this research explores underlying political and policy dynamics from the perspective of both metropolitan and local affairs. Through these, this research can provide significant insights about interactive, multifaceted processes among political and administrative, economic and socio-demographic dimensions under suburban shrinkage.

### **III) Path-dependent processes: evolutionary influences of the paradigm shift within the contextual transition from growth to shrinkage**

There is little research that has explored path-dependent phenomena associated with suburban spaces, especially with a view to the contextual transition from growth to shrinkage. Suburban transformations are path-dependent phenomena in political and administrative, economic and socio-demographic terms (e.g. Ekers, Hamel and Keil, 2015). In this vein, this research targets a time period of '1975 to 2015' by dividing it into the two sequential, differentiated periods of '1975 to 1995' and '1995 to 2015', namely the pre- and post-bubble periods. Thus, it explores the influences of the paradigm shift between these two periods. This approach can capture how the past political and administrative, economic and socio-demographic conditions formed during suburban growth have influenced recent Tokyo's suburban shrinkage. For example, Hanlon (2008)'s work examines one time period to explore the types of suburban growth and/or decline by suggesting that "Orfield's work is concerned with status or stock rather than change or flow" (Hanlon, 2008: 429). However, one time period would be insufficient to capture path-dependent, evolutionary processes embedded in Tokyo's suburban transformation. Tokyo Metropolis has experienced more rapid transitions among different phases of urbanisation, compared with other large metropolises. Therefore, the contextual transition from growth to shrinkage is the key aspect to be addressed.

Among path-dependencies in political and administrative, economic and socio-demographic socio-economic environments, the political and administrative path-dependency is important. It is



because the political and administrative dimension is slow to change (Soja, 2011a). For instance, while urban management and governance in Japan have gradually been changing under the decentralisation of powers and authorities, municipal governments have struggled to adapt their public administration systems and alter their thoughts and attitudes when tackling the new conditions of suburban shrinkage. This delayed optimisation has influenced Tokyo's suburban shrinking processes. In this vein, this path-dependent, evolutionary perspective enables a fuller investigation of Tokyo's suburban restructuring in political and administrative, economic and socio-demographic terms. Consequently, this research can provide significant insights about multi-dimensional path-dependencies embedded in Tokyo's suburban restructuring.

### **3.5 Chapter Conclusion: Necessity to Explore Path-dependent, Multifaceted Phenomena within Tokyo's Suburban Restructuring**

Tokyo's suburban territory, officially called the Tama Area, has a prominent feature within Tokyo Metropolis in political and administrative, economic and socio-demographic terms. Now, it is predicted that suburban shrinkage would continue, especially within the outer suburban territory. Especially, suburban economic shrinkage has already become apparent. This suburban shrinkage has been accelerated by the strong back-to-the-city movement. Notably, the complexity of Tokyo's suburban restructuring has been created in the context of synchronised, or all-at-once, concerns of all the political and administrative, economic, and socio-demographic aspects influenced by the interplay of international and domestic forces. In this vein, the significance of this research can be articulated from the following three features: 1) the overall tempo-spatial phenomenon: outer suburban shrinkage in the spatial context of polycentricity, 2) the multifaceted nature of change: influences of urban policies with a view to underlying inter-governmental and inter-sector dynamics, and 3) path-dependent processes: evolutionary influences of the paradigm shift within the contextual transition from growth to shrinkage. Therefore, an understanding of path-dependent, multifaceted phenomena within Tokyo's suburban restructuring can make significant contributions to contemporary suburban debates, given that similar suburban shrinkage would be observed in other large metropolises worldwide at the future matured stage of urbanisation.

## **Chapter 4**

### **Research Methodologies**

#### **4.1 Chapter Introduction**

This chapter explains the research methodologies used to address the research questions. This research employs the two-stage analysis at metropolitan and local levels, to each of which both quantitative and qualitative approaches are applied. Firstly, it provides overall explanations about these quantitative and qualitative approaches. The quantitative approach is conducted by the multivariate analyses of PCA and CA, and the qualitative approach is conducted by information processing through in-depth interviews and reviews on relevant policy and planning documents. Then, it is clarified how to apply these approaches taken at both metropolitan and local levels to answering the research questions and then to arriving at significant suburban policy and planning implications.

#### **4.2 Overall Research Process**

The overall research process (after this chapter) is composed of the following stages: I) reviewing relevant policies to Tokyo's suburban transformation with a view to urban-suburban relationships, II) analysing Tokyo's suburban transformation at metropolitan and local levels by the multivariate analyses of PCA and CA (quantitative approach), III) anatomising Tokyo's suburban restructuring from a metropolitan perspective (qualitative approach), IV) anatomising the three case studies with different trajectories from a local perspective (qualitative approach), and V) identifying policy and planning implications for Tokyo Metropolis and making conceptual and theoretical contributions to contemporary suburban debates. The metropolitan perspective indicates Tokyo's suburban restructuring within the metropolitan context, and the local perspective indicates the three case studies chosen from outer suburban cities. This overall research process with constituent stages is summarised in Table 4-1. Simply speaking, after numerically analysing Tokyo's suburban transformation through the quantitative approach at both metropolitan and local levels, recent Tokyo's suburban restructuring at these levels is explored through the qualitative approach, paying attention to underlying political and policy dynamics. The details of each constituent stage are explained in the later part of this chapter, after providing overall explanations about the integrated application of quantitative and qualitative approaches.

Table 4-1 Overall Research Process and Constituent Stages

Stage	Key Perspective	Scale	Approach	Chapter
<b>Stage I:</b> reviewing relevant policies to Tokyo's suburban transformation	<ul style="list-style-type: none"> <li>History of Tokyo's suburban territory before the WWII</li> <li>Urban policies associated with Tokyo's suburban transformation at different phases of urbanisation (spatial planning and development, urban and infrastructure (re)development, industrial and commercial promotion, and social welfare improvement)</li> </ul>	Metropolitan level	-	Chapter 5
<b>Stage II:</b> analysing Tokyo's suburban restructuring at metropolitan and local levels by the multivariate analyses of PCA and CA (from the perspective of the three P's analytical framework)	<ul style="list-style-type: none"> <li>Multi-dimensional urban-suburban divide created over recent decades</li> <li>Different growth or decline types of suburban municipalities during '1975 to 1995' or '1995 to 2015' (short-term development paths)</li> <li>Different trajectories of suburban municipalities within the contextual transition from growth to shrinkage (long-term development paths)</li> <li>Radical restructuring of Tokyo's outer suburban territory with different trajectories of outer suburban municipalities</li> <li>Selection of the three case studies of Tachikawa City, Hachioji City and Ome City</li> </ul>	Metropolitan and local levels (entire Tokyo's suburban territory consisting of all suburban municipalities)	Quantitative approach (multivariate analyses of PCA and CA)	Chapter 6
<b>Stage III:</b> anatomising Tokyo's suburban restructuring from a metropolitan perspective (from the perspective of the three I's anatomical framework)	<ul style="list-style-type: none"> <li>Underlying mechanisms (especially, political and policy dynamics) in Tokyo's suburban restructuring from a metropolitan perspective</li> <li>'Suburban balkanisation' from the perspective of the three I's</li> <li>Inter-governmental dynamics among different tiers of government (vertical dimension of government) and inter-sectoral dynamics (intra-governmental dimension)</li> </ul>	Metropolitan level (entire Tokyo's suburban territory within the metropolitan context)	Qualitative approach (interview information processing and documentation review)	Chapter 7
<b>Stage IV:</b> anatomising the three case studies with different trajectories from a local perspective (from the perspective of the three I's anatomical framework)	<ul style="list-style-type: none"> <li>Underlying mechanisms (especially, political and policy dynamics) in the different trajectories of Tachikawa City, Hachioji City and Ome City from a local perspective</li> <li>Local differentiations of the metropolitan-wide three I's dynamics</li> <li>Inter-governmental dynamics among municipal governments (horizontal dimension of government)</li> </ul>	Local level (three case studies: Tachikawa City, Hachioji City and Ome City)	Qualitative approach (interview information processing and documentation review)	Chapter 8
<b>Stage V:</b> identifying policy and planning implications for Tokyo Metropolis and making conceptual and theoretical contributions to contemporary suburban debates (from the perspective of the three I's policy-making framework)	<ul style="list-style-type: none"> <li>Policy and planning implications for the future suburban sustainability and regeneration of Tokyo Metropolis</li> <li>Lessons learnt from Tokyo's case for other large metropolises</li> <li>Conceptual and theoretical contributions to contemporary suburban debates</li> </ul>	Metropolitan and local levels	Quantitative and qualitative approaches	Chapter 9

Source: Author's own

### 4.3 Integrated Application of Quantitative and Qualitative Approaches

This research employs both quantitative and qualitative approaches in an integrated manner. The former is conducted by the multivariate analyses of PCA and CA with use of statistical data, and the latter is conducted by interpreting information obtained through semi- and non-structured interviews, as well as by scrutinising relevant policy and planning documents. From the viewpoint of the relationship between these approaches and research questions, the quantitative approach is mainly applied for Research Question (1), and the qualitative approach is mainly applied for Research Question (2). On the basis of the integrated review on qualitative and quantitative approaches-based findings, Research Question (3) is addressed. This relationship is shown in Table 4-2.

Table 4-2 Correspondence of Quantitative and Qualitative Approaches to Research Questions

	Approach		Chapter
	Quantitative	Qualitative	
<b>Research Question 1:</b> What transformations have existed in recent Tokyo's suburban restructuring?	◎	○	Chapter 6
<b>Research Question 2:</b> How have urban policies under the three-tier governmental system of Japan influenced recent Tokyo's suburban restructuring?	○	◎	Chapters 7 and 8
<b>Research Question 3:</b> What policy and planning implications can be drawn for Tokyo Metropolis and other large metropolises? What conceptual and theoretical contributions can be made to contemporary suburban debates on the basis of Tokyo's case?	◎	◎	Chapter 9

Note: ◎ : Primary approach ○: Secondary approach

Source: Author's own

From a theoretical perspective, this integrated application of quantitative and qualitative approaches takes account of the concept of critical realism. In the field of social science, there are mainly three approaches, namely: 1) positivism, 2) interpretivism, and 3) critical realism (Harding and Blokland, 2014). According to Harding and Blokland (2014), positivism speaks to regularities between causes and effects (or events). It does not pay much attention to underlying mechanisms between causes and effects. Therefore, positivism is mainly found in the field of natural science. Interpretivism is almost opposite to positivism, suggesting that scientific methods for the natural science field cannot be used for an understanding of the social science field. By contrast, interpretivism attempts to interpret societies by investigating reasons underlying actions or behaviours. Therefore, societies can be differently understood depending on researchers' interpretations. Therefore, in simple terms, positivism stresses objectivity and interpretivism does subjectivity. In turn, critical realism has emerged in the 1970s. Critical realism recognises that abstract theories or concepts can serve as a base for an understanding of

societies, but suggests that empirical observations are essential to develop these theories or concepts. In some sense, critical realism reconciles the strengths and weaknesses of positivism and interpretivism (Harding and Blokland, 2014). According to Sayer (1992, 2000), critical realism tries to understand underlying mechanisms, or causal relationships, in the sequence of 'structure -> mechanism -> effect (or event)', differently from positivism that looks regularities in the sequence of 'causes -> effects'. For an understanding of underlying mechanisms, he suggests the importance of applying a combination of extensive and intensive methods; as representative examples, extensive methods include statistical analysis, and intensive methods do interactive interviews. Extensive methods are useful to observe generalised phenomena with stronger objectivity, but they are less explanatory. By contrast, intensive methods are beneficial to explore the causal relationships of events, but interpretations substantially depend on researchers' subjectivity. Besides, intensive methods are more time-consuming than extensive methods. Then, the combination of extensive and intensive methods can reconcile their strengths and weaknesses (Sayer, 1992, 2000). Considering these, the concept of critical realism is useful for this research that tries to explore the underlying mechanisms of Tokyo's suburban restructuring, especially political and policy dynamics. That is, the integrated application of quantitative and qualitative approaches allows us to explore the causal relationships of Tokyo's suburban restructuring captured by the three P's from the perspective of underlying dynamics.

The underlying mechanisms of Tokyo's suburban restructuring are difficult to be revealed only by the multivariate analyses. It is partly because the process of policy formulation and implementation is one of the most key elements that have created Tokyo's suburban restructuring. In this vein, the qualitative approach aims at the following two aspects: 1) to re-interpret quantitative approach-based findings, and 2) explore what cannot be identified only by the quantitative approach, especially in terms of underlying political and policy dynamics. This is a shift from an exploratory analysis by the quantitative approach to an explanatory analysis by the qualitative approach. Importantly, the interviews enable us to explore very recent Tokyo's suburban affairs exactly amid suburban shrinkage that has apparently emerging since the 2010s. This is partly because the quantitative approach is applied for the time duration of twenty years, namely '1975 to 1995' or '1995 to 2015', even for the analysis of short-term development paths. Yet, the setting of this time framework is suitable to investigate multi-dimensional path-dependencies within the contextual transition from growth to shrinkage. Therefore, the qualitative approach can complement the quantitative approach by exploring very recent Tokyo's suburban affairs. Thus, the integrated review on both qualitative- and quantitative-based findings enables us to arrive at fruitful policy and planning implications for the future suburban sustainability and regeneration of Tokyo Metropolis.

## **4.4 Methods in Quantitative and Qualitative Approaches**

### **4.4.1 Multivariate Analyses of PCA and CA**

This research employs PCA and CA for the multivariate analyses. From the viewpoint of the statistical approach, there are mainly two types as follows: a confirmatory data analysis and an exploratory data analysis. In simple terms, there is a difference between these two types in terms of analytical processes, namely: for the confirmatory data analysis, 'data -> hypotheses, priori assumptions, or causal models -> analysis', and for the exploratory data analysis, 'data -> analysis -> hypotheses, priori assumptions, or causal models'. Tukey (1977) claims the importance of the exploratory data analysis in which statistical analysis is used for the development of hypotheses, priori assumptions, or causal models by criticising the confirmatory data analysis in which statistical analysis is used mainly for hypothesis testing. PCA and CA are mainly used for the exploratory data analysis. That is, researchers do not need to have any hypotheses, priori assumptions, or causal models when applying PCA and CA. Therefore, PCA and CA can be simply applied to statistical data, but analysis results depend on researchers' interpretations. In this research, PCA and CA are applied to each of the time periods, namely '1975 to 1995' or '1995 to 2015'. Key concepts and terms related to PCA and CA are explained below.

Firstly, PCA is a statistical procedure for dimensionality reduction, or data reduction, to explore the latent structure of an original dataset. Let us imagine the original dataset as a matrix of suburban municipalities and originally employed variables. In PCA, a set of originally employed variables that are linearly correlated is converted into a set of linearly uncorrelated variables, called Principal Components (PCs), through an orthogonal transformation. In this procedure, originally employed variables are standardised. Consequently, the original dataset is transformed to the new coordinate system of PCs in the multi-dimensional space. PCs are calculated as the liner combinations of independent, transformed variables in the form of predicting the original dataset to the maximum extent. The first PC is calculated to best predict the variance of the original dataset, and the subsequent PCs are calculated to best predict the remaining variances of the original dataset. There are the following three important factors to be calculated: eigenvalues, PC Scores and PC Loadings. The eigenvalues of PCs indicate the extent of variability; simply, PCs with higher eigenvalues are more important. PC Scores are transformed values that show new coordinates corresponding to PCs. For instance, PC1 Scores correspond to PC1, and PC2 Scores to PC2. The PC Scores of suburban municipalities can be plotted on the sets of PC axes in the multi-dimensional space. For example, using the PC1 and PC2 Scores of a given suburban municipality, its position can be plotted on the two-dimensional space of PC1 and PC2. In this regard, PCA is useful for the data visualisation of the original dataset. PC Loadings show how originally employed variables are loaded on PCs, namely their weights on PCs.

Secondly, CA is a statistical procedure used to classify suburban municipalities into groups (called clusters). Suburban municipalities within the same group would be similar one another, and different from other suburban municipalities within other groups. Therefore, CA is useful to find the typical patterns of suburban municipalities, but the interpretation of these patterns depends on researchers. CA is mainly divided into the following two types: hierarchical clustering and non-hierarchical clustering. Hierarchical clustering, or connectivity-based clustering, can construct a sequence of partitions in the range from a single object to all objects. Non-hierarchical clustering, or centroid-based clustering, is used to classify objects into a certain number of clusters, which needs to be set in advance. In this research, K-means++ Clustering as non-hierarchical clustering is used to create stable clusters; its algorithm is called K-means++, and K is the number of clusters. In this clustering, objects are classified depending on their distances to the centres of groups. In this research, CA is applied to the new coordinates of PCs; in other words, CA is not applied directly to the original dataset. That is, suburban municipalities which are closely plotted on the new coordinate system of PCs are classified into the same cluster. There exists research that uses a combination of PCA and CA (e.g. Jolliffe, 2002; Ding and He, 2004). After the application of PCA and CA, suburban municipalities are classified into several clusters that are used to find their typical differences.

For the multivariate analyses, forty-four (44) variables are employed by taking account of the three P's framework, namely: 1) socio-demographic, 2) economic, and 3) political and administrative (fiscal) factors. These variables are presented in Table 4-3. To be noted, this research stresses flow variables rather than stock variables to investigate the transformation processes of suburban municipalities. In reality, these variables were determined through trial-and-error processes, even reflecting the information obtained through interviews.

Table 4-3 Employed Variables from Three P's Analytical Framework:  
Socio-demographic, Economic, and Political and Administrative (Fiscal) Factors

Employed Variable			Period	Source
Three P's Analytical Framework	Socio-demographic Transformation (Population)	Stock	1) Population density (pers/ ha)	1995, 2005 Population Census
			2) Share of young population (%)	
			3) Share of productive population (%)	
			4) Share of elderly population (%)	
			5) Aging index	
			6) Dependency ratio	
		Flow (annual growth rate)	7) Population (%)	1975-1995 1995-2015 Population Census
			8) Young population (%)	
			9) Productive population (%)	
			10) Elderly population (%)	Vital Statistics
			11) Number of births (%)	
			12) Number of deaths (%)	
			13) Number of foreigners (%)	Statistics on Foreigners Registered in Japan
			14) Number of publicly assisted households (%) <sup>1</sup>	1975-1995 1995-2015 TMG
			15) Average income (%)	1975-1995 1995-2015 MIAC
	Economic Restructuring (Production)	Stock	16) Employment density (pers/ ha)	1995, 2005 Establishment and Enterprise Census
			17) Share of primary-sector employment (%)	
			18) Share of secondary-sector employment (%)	
			19) Share of tertiary-sector employment (%)	
		Flow (annual growth rate)	20) Agricultural production (%)	1975-1995 1995-2005 Statistics of Agricultural Income Produced
			21) Manufacturing production (value of shipments) (%) <sup>2</sup>	1975-1995 1995-2014 Census of Manufacture
			22) Commercial consumption (sales turnover) (%) <sup>3</sup>	1974-1994 1994-2014 Census of Commerce
			23) Establishment (%)	1975-1996 1996-2014 Establishment and Enterprise Census/ Economic Census <sup>4</sup>
			24) Number of small enterprises (less than 30 persons) (%)	
			25) Number of non-small enterprises (30 persons and over) (%)	
			26) Employment (%)	
			27) Secondary-sector employment (%)	
			28) Tertiary-sector employment (%)	NA <sup>5</sup> 2005-2015 TMG
			29) Number of NPOs (%)	
			30) Land Price (%)	1975-1995 1995-2015 TMG (standard land price)
	Urban Policies (Political and Administrative - Fiscal) (Policies)	Stock	31) Municipal tax revenue per resident (thousand Yen)	1995, 2005 MIAC (TMG)
			32) Municipal expenditure per resident (thousand Yen)	
			33) Share of social welfare expenditure (%)	
			34) Share of commercial and industrial expenditure (%)	
			35) Share of public work expenditure (%)	
			36) Financial index <sup>6</sup>	
		Flow (annual growth rate)	37) Municipal tax revenue (%)	1975-1995 1995-2015 MIAC (TMG)
			38) National grants-in-aid (for non-flexible use) from GOJ (%)	
			39) Local allocation tax (for flexible use) from GOJ (%)	
			40) Metropolitan grants-in-aid from TMG (%)	
			41) Municipal expenditure (%)	
			42) Social welfare expenditure (%)	
			43) Commercial and industrial expenditure (%)	
			44) Public work expenditure (%)	

Note: 1) Stock variables are those as of 1985 for the growth period of '1975 to 1995' and those as of 2005 for the shrinkage period of '1995 to 2015'.  
2) Developed areas (not administrative areas) are utilised for the calculation of population and employment densities.

Source: Author's own

<sup>1</sup> There are unfound data for some municipalities related to the Nishi-tama District (Nishi-tama-gun). Therefore, the annual growth rates of these municipalities are supplemented by the following (as the average): for '1975 to 1995', an annual growth rate for the entire area covered by the current Nishi-tama District, Akiruno City and Hamura City, and for '1995 to 2015', that for the entire current Nishi-tama District.

<sup>2</sup> The utilised data targets establishments with an employment of 4 and over.

<sup>3</sup> The utilised data excludes consumption for food and drink.

<sup>4</sup> There are some discontinuities during 1996 to 2014 due to changes in the survey methodologies from the 1996 Establishment and Enterprise Census to the 2014 Economic Census.

<sup>5</sup> There existed no NPOs during 1975 to 1995 before the enactment of the Act on Promotion of Specified Non-profit Activities of 1998.

<sup>6</sup> The fiscal index for Akiruno City as of 1985 is not available, so its fiscal index as of 1995 is utilised in replace.



The reasons why these employed variables are chosen are as follows. Firstly, in terms of socio-demographic factors, this research mainly looks at the trends of population, age structure deaths and births, average income, publicly assisted households and foreigners. This is partly because increased elderly population with elongated life expectancy, declined young population with diminished fertility rates, and decreased household incomes are the key issues of Tokyo's suburban restructuring. Here, compared with US and European cities, nationalities, races, ethnicities and religions are less relevant to Japanese cities. Secondly, in terms of economic factors, manufacturing production, commercial consumption, employment and establishment by industrial sector, and land prices are mainly paid attention. Here, it is important to look at changes in the production and consumption sides, since manufacturing and commercial industries are key industries for Tokyo's suburban territory. Besides, changes in land price are important to be addressed, because they tend to reflect overall economic situations. Here, high-order employment, which is useful to investigate the extent of polycentricity, could not be incorporated due to its data unavailability in the long term. Finally, in terms of political and administrative factors, the trends of municipal tax revenue, transferred fiscal resources from GOJ and TMG, and municipal expenditure by policy domain are mainly paid attention.

In the numerical analyses, political and administrative aspects are investigated through fiscal factors.<sup>7</sup> This research look at not only the revenues and expenditures of municipal governments, but also look at the inter-governmental condition on the revenue side (through transferred fiscal resources from GOJ and TMG) and the inter-sectoral condition among different policy domains on the expenditure side. However, inter-governmental and inter-sectoral dynamics are explored mainly through the qualitative approach. For instance, national grants-in-aid from GOJ (financial supports for non-flexible use), local allocation tax from GOJ (financial supports for flexible use), and metropolitan grants-in-aid from TMG do not include all subsidies from upper-level governmental entities. Moreover, these transferred fiscal resources do not include the direct investments of GOJ and TMG (for Tokyo's suburban territory) through their own fiscal resources. Therefore, increases in these transferred fiscal resources do not indicate the increased political and policy emphasis, or the increased extent of proactivity, of upper-level governmental entities towards suburban municipalities. Therefore, inter-governmental dynamics, including the underlying processes of policy making and implementation at different tiers of government, can hardly be understood only through municipal-level fiscal conditions. The inter-sectoral condition on the expenditure side would give some insights about inter-sectoral dynamics, but these insights are insufficient to understand the underlying processes of inter-sectoral policy arrangements among different policy domains. Therefore, inter-governmental and inter-sectoral dynamics need to be explored through the qualitative approach.

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<sup>7</sup> Iijima (2016) applies PCA and CA to 7 fiscal variables for an understanding of the recent fiscal conditions of Tokyo's suburban municipalities, but employed variables in his research do not incorporate many variables, especially those in the socio-demographic and economic dimensions and those related to inter-governmental and inter-sectoral dynamics.

#### 4.4.2 Semi-structured and Non-structured Interviews

For the qualitative approach, a series of in-depth interviews were conducted with various informants, including academics, former and current public officials of TMG and municipal governments, former and current researchers of the para-government sector, private practitioners, and representatives of NPOs and local community groups. 45 interviews consisting of 78 persons were conducted in this research, as shown in Appendix A. Simultaneously, relevant policy and planning documents were reviewed.

From the viewpoint of interview methods, there are mainly three types as follows: 1) structured, 2) semi-structured, and 3) non-structured interviews. According to Nomura (2017), the advantages and disadvantages of each interview type are as follows. Structured interviews are useful for consistent, quantitative analysis-based comparisons based on obtained information through standardised questionnaires, but difficult to obtain detailed information irrelevant to these questionnaires. Semi-structured and/or non-structured interviews are useful to obtain detailed information mainly for qualitative analyses, including informants' experiences, thoughts and feelings, but difficult to be used for quantitative comparisons. Considering these, semi-structured and/or non-structured interviews are more suitable for the approaches of critical realism and interpretivism, whilst structured interviews are more suited to the approach of positivism (Nomura, 2017).

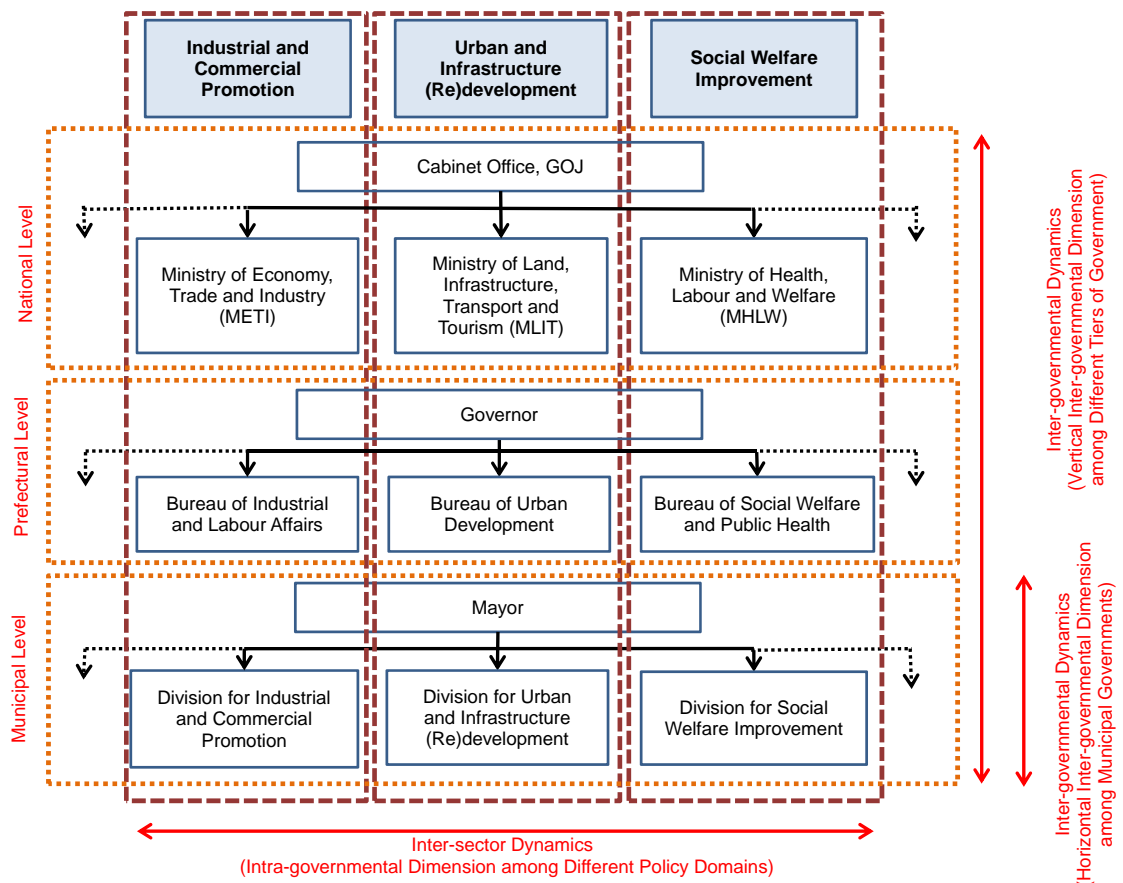
Considering these, this research employed semi-structured and non-structured interviews for the qualitative approach: that is, semi-structured interviews for the public sector, and non-structured interviews for academic, private and community sectors.<sup>8</sup> For the public sector, discussion topics and relevant questions were sent to informants prior to interviews. It is part because public officials in Japan, who tend to attend an interview as a group, wished to know these topics and questions in advance. These semi-structured interviews were beneficial to keep coherence and make comparisons among the three case studies. Simultaneously, discussions were expanded and deepened during the semi-structured interviews, depending on the importance of discussion topics. For academic, private and community sectors, non-structured interviews were useful to make deep discussions and even obtain unexpected information. It is partly because discussion topics for these sectors could be to a substantial extent assumed depending on their specialised activities.

Especially in the case of interviews for the public sector, the specific political and administrative system of Japan needs to be paid attention when investigating political and policy dynamics related to urban policies. In Japan, urban policies targeted in this research have been formulated and implemented, or unimplemented, under the three-tier governmental system of national, prefectural and municipal levels, as illustrated in Figure 4-1. Broadly, at the national level, urban

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<sup>8</sup> Apart from formal interviews, some beneficial information was obtained through informal talks. This information is described in footnotes.

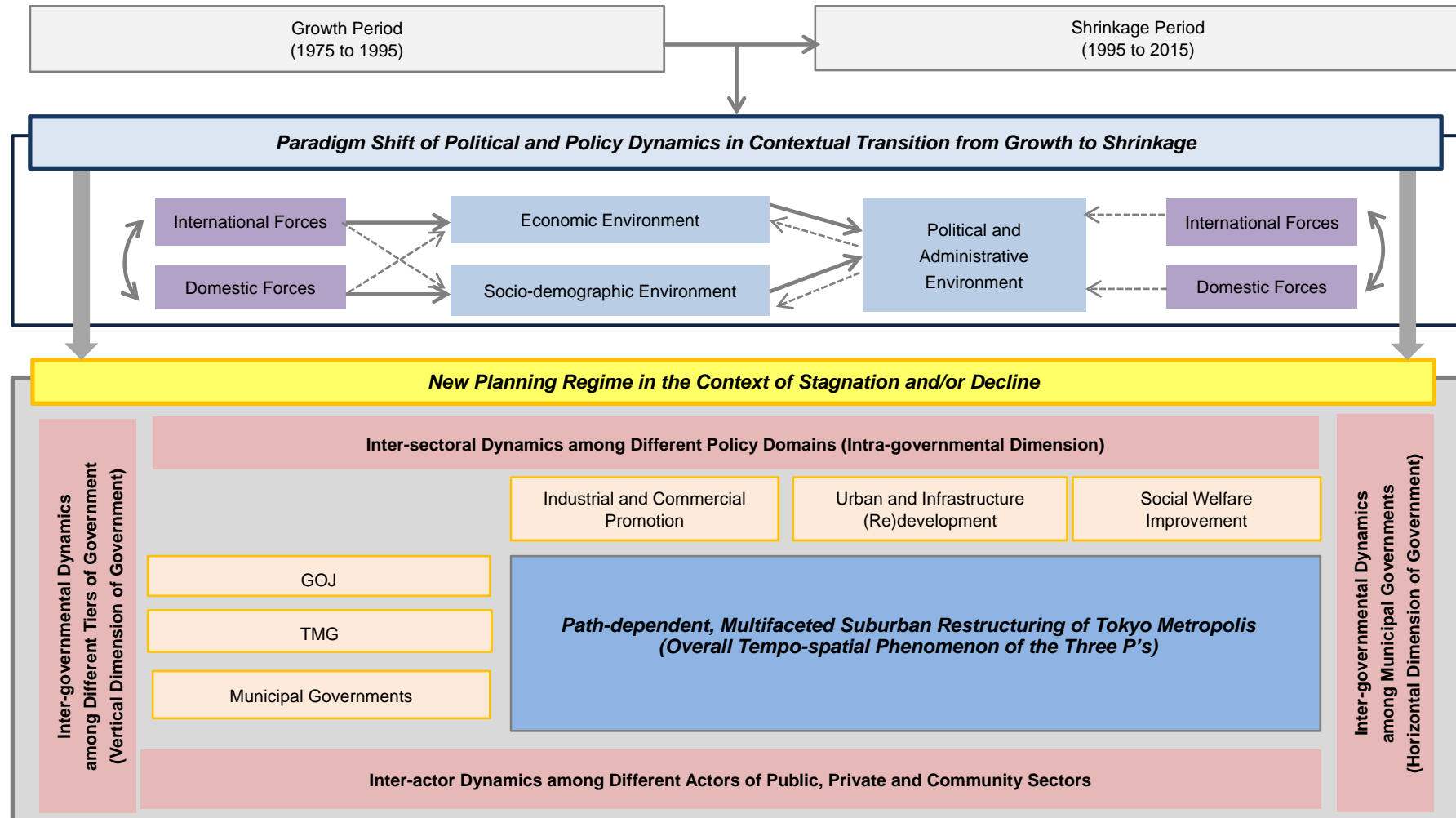
and infrastructure (re)development-related policies are administered by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), industrial and commercial promotion-related policies by the Ministry of Economy, Trade and Industry (METI), and social welfare improvement-related policies by the Ministry of Health, Labor and Welfare (MHLW). At prefectural level, within TMG, the first is administered by the Bureau of Urban Development, the second by the Bureau of Industrial and Labour Affairs, and the third by Bureau of Social Welfare and Public Health, as of 2017. At municipal level, each of these three policy domains is administered by a specific administrative division within each municipal government in a similar way to TMG. Within each division, there are some specialised sections: for instance, elderly care and childcare sections in the case of the policy domain of social welfare improvement. Simultaneously, in recent decades, municipal governments have tended to establish a specific administrative division for comprehensive planning and policy coordination to prioritise these different policies and determine balanced fiscal arrangements under magnified fiscal limitations. However, there has still existed strong sectionalism.



Source: Author's own

Figure 4-1 Simplified Diagram of Policy Making and Implementation under Japanese Political and Administrative System

As discussed in Chapter 2, the following key dynamics are important to be explored for an understanding of suburban politics and governance, namely: 1) inter-governmental dynamics among different tiers of government (vertical dimension of government) and among municipal governments (horizontal dimension of government), 2) inter-sectoral dynamics among different policy domains (intra-governmental dimension), and 3) inter-actor dynamics among public, private and community sectors. As revealed later, Tokyo's path-dependent, multifaceted suburban restructuring, which is captured by the three P's analytical framework, has embodied these specific dynamics. As mentioned in Chapter 3, the new planning regime has now emerged within the contextual transition from growth to shrinkage. This regime has been generated under changes in the socio-demographic, economic and political and administrative environments of the policy-making system, which have been created through the interplay of international and domestic forces. Within this regime, there have emerged the aforementioned specific dynamics. These relationships are conceptualised in Figure 4-2. Considering these, during interviews, these specific dynamics and their changes within the contextual transition from growth to shrinkage need to be paid attention.



Source: Author's own

Figure 4-2 Specific Dynamics Embodied within Tokyo's Suburban Restructuring of Three P's

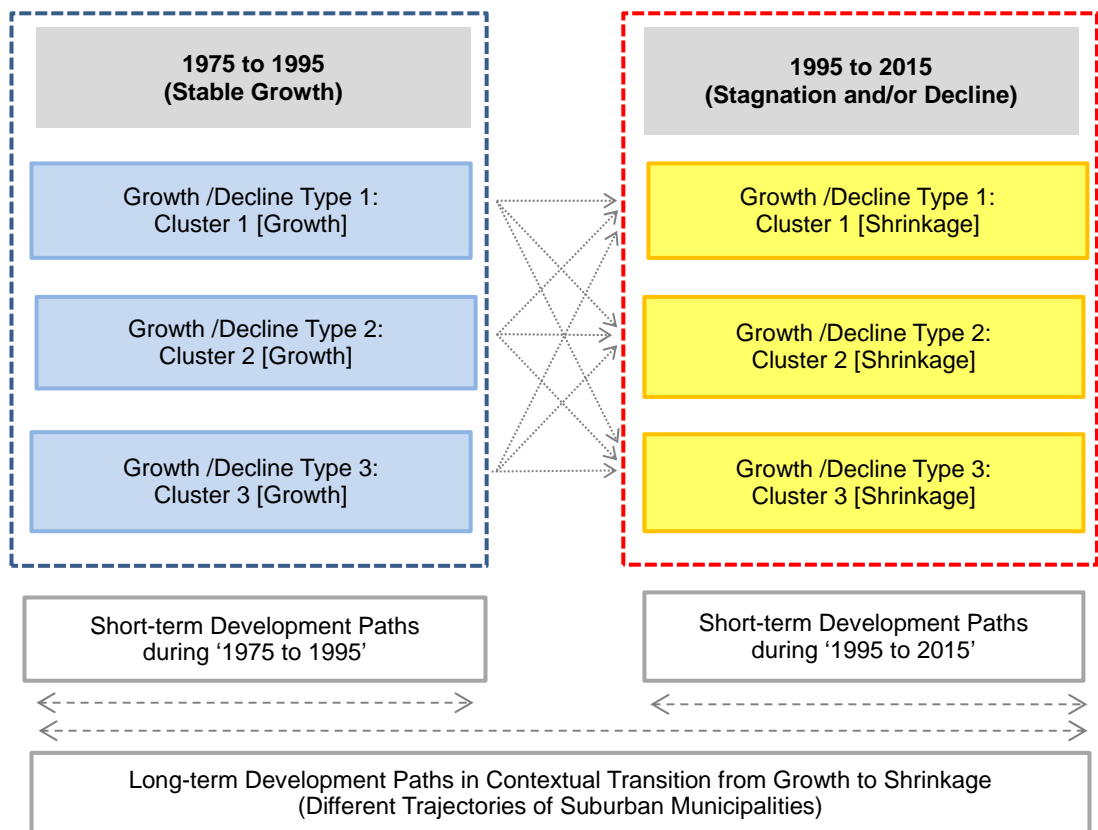
## **4.5 Detailed Explanations by Constituent Stage**

### **Stage A: Reviewing relevant policies to Tokyo's suburban transformation (Chapter 5)**

This stage conducts a policy review from an evolutionary perspective to provide a fundamental understanding of the relationship between urban policies and Tokyo's suburban transformations. This review looks at both pre- and post-WWII periods, while placing more emphasis on the post-WWII period. It is because interviews in this research revealed that the historical contexts of Tokyo's suburban territory formed even before the WWII have still influenced current suburban affairs. With regard to the post-WWII period, Tokyo's long-term suburban transformation is divided into four differentiated phases. By this division, it is explained how the two time periods, namely '1975 to 1995' of stable growth and '1995 to 2015' of stagnation and/or decline, are positioned within Tokyo's long-term suburban transformation.

### **Stage B: Analysing Tokyo's suburban transformation at metropolitan and local levels by the multivariate analyses of PCA and CA (quantitative approach) (Chapter 6)**

This stage explores Tokyo's suburban transformation through the quantitative approach from the perspective of the three P's analytical framework. There are four sub-stages as follows: 1) investigation into changes in urban-suburban dynamics within the contextual transition from '1975 to 1995' to '1995 to 2015', 2) identification of different growth and/or decline types of suburban municipalities during '1975 to 1995' and '1995 to 2015', and 3) identification of different trajectories of suburban municipalities within the contextual transition from '1975 to 1995' to '1995 to 2015'. Thus, the three case studies are selected by looking at different trajectories. Here, different growth and/or decline types during '1975 to 1995' or '1995 to 2015' are referred to as short-development paths, and transitions from a certain cluster type during '1975 to 1995' to that during '1995 to 2015' are referred to as long-term development paths. These long-term development paths are regarded as the different trajectories of suburban municipalities. These relationships are diagrammed in Figure 4-3. Here, the time period of '1975 to 1995' is positioned in the context of stable growth, and the time period of '1995 to 2015' is positioned in the context of stagnation and/or decline. Yet, for simplification, the former is referred to as the growth period, and the latter as the shrinkage period. Thus, a shift from '1975 to 1995' to '1995 to 2015' is referred to as the contextual transition from growth to shrinkage.



Source: Author's own

Figure 4-3 Conceptual Diagram for Growth and/or Decline Types:  
Short- and Long-term Development Paths

### 1) Investigation into changes in urban-suburban dynamics within the contextual transition from growth to shrinkage

This sub-stage simply reviews how urban-suburban dynamics have changed during the two time periods of growth and shrinkage from the perspective of the three P's. This review gives us a basic understanding of the positioning of Tokyo's suburban territory within the metropolitan context during these two time periods, revealing that the relative dynamics between Tokyo's urban and suburban territories have turned inside out within the contextual transition from growth to shrinkage. Then, it is grasped that the multi-dimensional urban-suburban divide in terms of the three P's has been increasing during the shrinkage period of '1995 to 2015'.

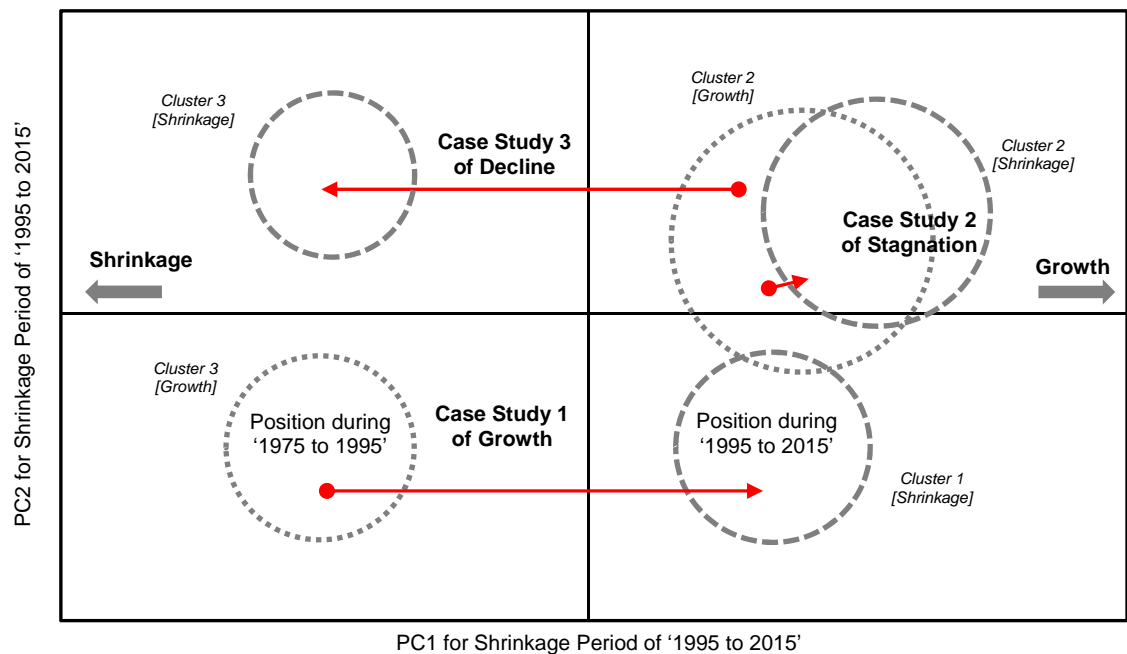
### 2) Identification of different growth and/or decline types of suburban municipalities (from the perspective of short-term development paths)

This sub-stage identifies the different growth and/or decline types of suburban municipalities as short-term development paths. PCA and CA are applied to all suburban municipalities, using the aforementioned variables employed from the three P's. This allows us to investigate what kinds of growth and/or decline types of suburban municipalities have been embedded in Tokyo's

suburban transformation during '1975 to 1995' or '1995 to 2015'. Simultaneously, it is possible to grasp the mode of suburban transformation and its change (within the contextual transition from growth to shrinkage) by exploring what correlations among the three P's have existed during during '1975 to 1995' or '1995 to 2015'.

### 3) Identification of different trajectories of suburban municipalities within the contextual transition from growth to shrinkage (from the perspective of long-term development paths)

This sub-stage identifies the different trajectories of suburban municipalities as long-term development paths. These trajectories are represented by the transitions among different growth and/or decline cluster types within the contextual transition from growth to shrinkage. These different trajectories can also be understood on the new coordinate system of PCs. Taking advantage of data visualisation by PCA, the positions of suburban municipalities during the growth period of '1975 to 1995' can be, through re-calculation, plotted on the new coordinate system of the shrinkage period of '1995 to 2015', as diagrammed in Figure 4-4. In this figure, directional arrows show changes in the positions of suburban municipalities within the contextual transition from growth to shrinkage, namely their different trajectories.



Source: Author's own

Figure 4-4 Conceptual Diagram for Different Trajectories on New Coordinate System of PCs



### **Stage C: Anatomising Tokyo's suburban restructuring from a metropolitan perspective (qualitative approach) (Chapter 7)**

This stage explores recent Tokyo's suburban restructuring through the qualitative approach from a metropolitan perspective, paying attention to underlying mechanisms. Alongside the review on relevant policy and planning documents, semi-structured and non-structured interviews were conducted to various informants who can comment on the metropolitan-wide picture of recent Tokyo's suburban restructuring. The number of interviews for this metropolitan-wide investigation is sixteen (16) among the total of 45 interviews. The details of interviewees are described in Appendix A.

Key characteristics about interviews are as follows. Firstly, in terms of the academic sector, interviewees include an emeritus professor who served as the chairmen of the committees of Hachioji City and Ome City, and a professor related to the activities of JPC that announced the 'Masuda Report'. In terms of the public sector, interviewees include former director generals of TMG who could closely work with governors and engaged in the policy- and decision-making processes at TMG (among these, one person who served as the chairman of the committee of Tachikawa City), public officials of TMG in charge of the planning and development of Tokyo's suburban territory, former managers of TMG who work or worked at the ITMR after their retirement (among these, one person who served as the former secretary-general of the Tokyo Association of Mayors and participated in the preparation of ITMR (2011)'s report, and another person who wrote about the urban planning history of Tokyo's suburban territory), and public officials in charge of the Nishi-tama Network as an inter-municipal consortium. In terms of private and community sectors, interviewees include a general manager of one of the three largest real estate developers in Japan, manager of CBRE, Inc., general manager of the Tama Shinkin Bank as one of the three main local banks in Tokyo's suburban territory, general manager of the TAMA Association which has led an industrial cluster project, and representatives of NPOs and/or local community groups.

Key aspects paid attention during interviews include the following: metropolitan-level issues and problems and their changes, metropolitan-level policies and their shifts, changes in the positioning of Tokyo's suburban territory within the metropolitan context, intra-metropolitan disparities and their changes, the way of involvements of upper-level governmental entities into Tokyo's suburban territory and their changes, and requests from municipal governments. Simultaneously, relevant documents were reviewed to supplement information obtained through interviews. Through this stage, it is revealed that recent Tokyo's suburban restructuring captured by the three P's has been generated by the specific metropolitan-wide dynamics of the three I's.

**Stage D: Anatomising the three case studies with different trajectories from a local perspective (qualitative approach) (Chapter 8)**

This stage explores the three case studies of Tachikawa City, Hachioji City and Ome City, paying attention to the causal relationships of their different trajectories. Alongside the review on relevant policy and planning documents, semi-structured and non-structured interviews were conducted to various informants such as public officials of municipal governments, representatives of the Local Chambers of Industry and Commerce (CCIs), and representatives of NPOs and local community groups. The number of interviewees is twenty-nine (29) among the total of 45 interviews. The details of interviewees are described in Appendix A.

Interviews to municipal governments were separately conducted for each of the following different policy domains, namely: 1) comprehensive planning and policy coordination, 2) urban and infrastructure (re)development, 3) industrial and commercial promotion, and 4) social welfare improvement. Besides, in terms of social welfare improvement, interviews were separately conducted to each of the following sub-fields: elderly care, childcare, education and medical care. Key aspects paid attention during interviews include the following: local-level issues and problems and their changes, local-level policy directions and their changes, inter-sectoral shifts among different policy domains, intra-suburban disparities and their changes, thoughts and actions aimed to make differentiations against neighbouring suburban municipalities, the way and extent of inter-municipal collaboration, thoughts and actions aimed to support private and community sectors, requests towards upper-level governmental entities, and requests from local communities. In addition, interviews were conducted to local CCIs, which have information about industrial and commercial activities of the private sector, and to representatives of NPOs and/or local community groups. Simultaneously, relevant documents were reviewed to supplement information obtained through interviews. Through this stage, it is revealed that the multi-dimensional divergence of outer suburban municipalities, namely different trajectories in terms of the three P's, has been generated by local differentiations of the metropolitan-wide three I's dynamics.

**Stage E: identifying policy and planning implications for Tokyo Metropolis and making conceptual and theoretical contributions to contemporary suburban debates (Chapter 9)**

On the basis of key findings identified by the integrated application of quantitative and qualitative approaches at metropolitan and local levels, this stage addresses the following three subjects: 1) policy and planning implications for the suburban sustainability and regeneration of Tokyo Metropolis, 2) applications of lessons learnt from Tokyo's case to other large metropolises worldwide, and 3) conceptual and theoretical contributions to contemporary suburban debates. Firstly, this research proposes a new approach with new modes of the three I's; in this process,

the three I's anatomical framework, which is derived from the three P's analytical framework, is utilised for policy making and implementation as the three I's policy-making framework. Secondly, it proposes possible policy and planning implications for other large metropolises worldwide from the perspective of the three I's. Finally, by reflecting Tokyo's suburban transformation with use of Phelps and Wu (2011)'s framework, it addresses conceptual and theoretical contributions to contemporary suburban debates with a view to the relationships between the three P's and three I's.

#### **4.6 Chapter Conclusion: Necessity of Two-stage Analysis by Integrated Application of Quantitative and Qualitative Approaches**

This research employs the two-stage analysis at metropolitan and local levels, applying the combination of quantitative and qualitative approaches. This integrated application of quantitative and qualitative approaches at different spatial scales is important to explore the path-dependent, multifaceted phenomena of Tokyo's suburban transformation and its underlying mechanisms. The quantitative approach with use of PCA and CA can explore Tokyo's suburban transformation within the three P's analytical framework. The qualitative approach enables an investigation into underlying mechanisms within the three I's anatomical framework, especially the political and policy dynamics of the government sector and specific responses of private and community sectors to the new conditions of suburban shrinkage. Consequently, these research methodologies enable a fuller investigation of Tokyo's suburban restructuring with a view to the relationships between the three P's and three I's, which allows us to arrive at significant policy and planning implications.

## **Chapter 5**

# **Key Policy Development and Suburban Transformation of Tokyo Metropolis from an Evolutionary Perspective**

### **5.1 Chapter Introduction**

This chapter reviews urban policies associated with Tokyo's suburban transformation from an evolutionary perspective, which have been formulated and implemented, or unimplemented, to tackle ever-changing metropolitan and/or suburban issues. Tokyo's suburban territory has continued to host various transformations at different phases of urbanisation. This review deals with both pre- and post-WWII periods, while placing more focus on the post-WWII period. The reason why this review looks at the pre-WWII period is that from an international comparative perspective, Tokyo's suburban territory has a much longer history of accommodating human activities. Therefore, it is essential to comprehend the long-term historicity of Tokyo's suburban territory to appreciate how suburban inheritances have influenced the recent suburban restructuring. As for the post-WWII period, this review clarifies how the polycentric metropolitan structure has been pursued in spatial planning and development, paying attention to the targeted urban policies, namely: a) urban and infrastructure (re)development, b) industrial and commercial promotion, and c) social welfare improvement. Thus, this review explains the validity of setting up the time periods of '1975 to 1995' and '1995 to 2015', clarifying their positionings within Tokyo's long-term urbanisation process.

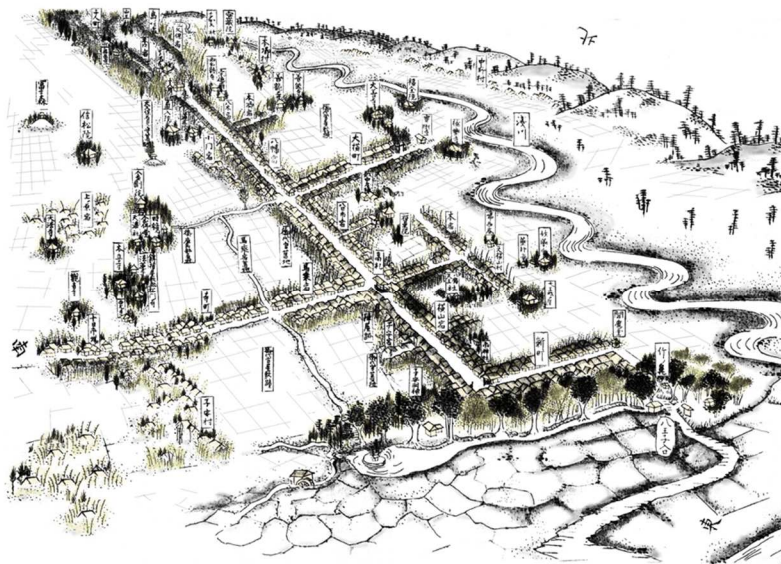
### **5.2 History of Tokyo's Suburban Territory before WWII**

As for the pre-WWII period, the major characteristics are chronologically summarised as follows. First, Tokyo's suburban territory accommodated an agrarian society dating back to ancient times. Second, it began to enjoy prosperity during the Edo era (1603-1868), when the capital city was relocated from Kyoto City to the city of Edo (presently, Tokyo Metropolis). Third, it achieved further flourishing through textile industries serving as a base for current manufacturing industries, especially since the Meiji era (1868-1912). Fourth, it experienced administrative reforms during the Meiji era (1868-1912) and Taisho era (1912-1926). Fifth, it accommodated various economic activities, especially in manufacturing, military and recreation industries, even before the WWII.

First, unlike the suburban spaces of US and European cities, Tokyo's suburban territory has a long history. Japan began to form an agrarian society in the Yayoi era during the third century BC to the third century AD, in which human beings began to settle down by forming agricultural

villages with advantage of arable fields. This formation was delayed in Tokyo's suburban territory due to its lower agricultural productivity and remoteness far from the then capital city located in the western part of Japan (Ike, 2015). However, it is assumed that Tokyo's suburban territory formed an agricultural society at least in the 10th century, accommodating a population of about 30 to 40 thousand (Kikuchi, 2015).

Second, Tokyo's suburban territory began to enjoy prosperity from the Edo era (1603-1868), flourishing as a transport node and a supply centre of fuelwoods, construction materials and other local products for the city of Edo. Simultaneously, it came to be supported by a major radial road, called the Kōshū-kaidō.<sup>1</sup> Then, several post stations, called the Shukuba-machi, were developed in the form of having accommodations, restaurants and shops; a relatively large post station was developed in Hachioji City (see Figure 5-1).<sup>2</sup>



Source: Shimpen-musashifudokikō [New records on the climate of the Musashi Area] (as for the picture, downloaded from <http://hatuzawa.la.coocan.jp/fudokinoue.html>)

Figure 5-1 Past Post Station in Hachioji City

Third, entering the Meiji era (1868-1912), some suburban cities, such as Hachioji City and Ome City, flourished as centres of textile industries with use of natural resources. This was driven by a centralised industrial development policy aimed at strengthening national powers through westernisation. These textile industries have still served as a base for the current local SMEs of the manufacturing sector. This prosperity generated rich families within Tokyo's suburban territory, who promoted political and cultural activities by learning foreign cultures in current

<sup>1</sup> The major five radial roads from the city of Edo to rural areas were developed, as follows: the Tōkai-dō, Nakasen-dō, Kōshū-kaidō, Nikkō-kaidō, and Ōshū-kaidō. These roads were used for the alternate attendance system, called the Sankin-kotai, in which feudal lords in rural areas were obligated by the government, called the Tokugawa-bakufu, to reside in the city of Edo on a periodic basis.

<sup>2</sup> A post-station in Ome City was developed alongside the Ome-kaidō.

Yokohama City, Kanagawa Prefecture. From the late period of the Meiji era (1868-1912) to the Taisho era (1912-1926), there developed residential and recreation areas in the form of being supported by the Kōbu Railway (presently, the JR Chūō Line) that opened between the current Shinjuku Ward and Hachioji City in 1889.

Fourth, during the Meiji era (1868-1912) and Taisho era (1912-1926), there occurred two significant political and administrative events at different spatial scales. From a wider perspective, Tokyo's suburban territory was transferred from Kanagawa Prefecture to Tokyo Prefecture (Tokyo-fu) in 1893.<sup>3</sup> One reason is that Tokyo City (Tokyo-shi) (roughly corresponding to current Tokyo's urban territory), which suffered from Cholera, suggested the easiness of watershed management by this administrative transfer of Tokyo's suburban territory serving as a water supply base (Hosaka, Umeda and Amano, 2014).<sup>4</sup> Alongside this, there activated discussions about the establishment of an independent prefecture governing Tokyo's suburban territory in the 1920s; emerged concepts include Musashino Prefecture with the prefectural capital of Hachioji City and that of Tama Prefecture with the prefectural capital of Tachikawa City (Hosaka, Umeda and Amano, 2014). However, this establishment has not been actualised until present. Next, from a more local perspective, a series of administrative annexations among cities, towns and villages was accelerated; this continued even in the Showa era (1926-1989). The chronology of these annexations is shown in Figure 5-2. These repeated annexations have generated local differentials within Tokyo's suburban territory.

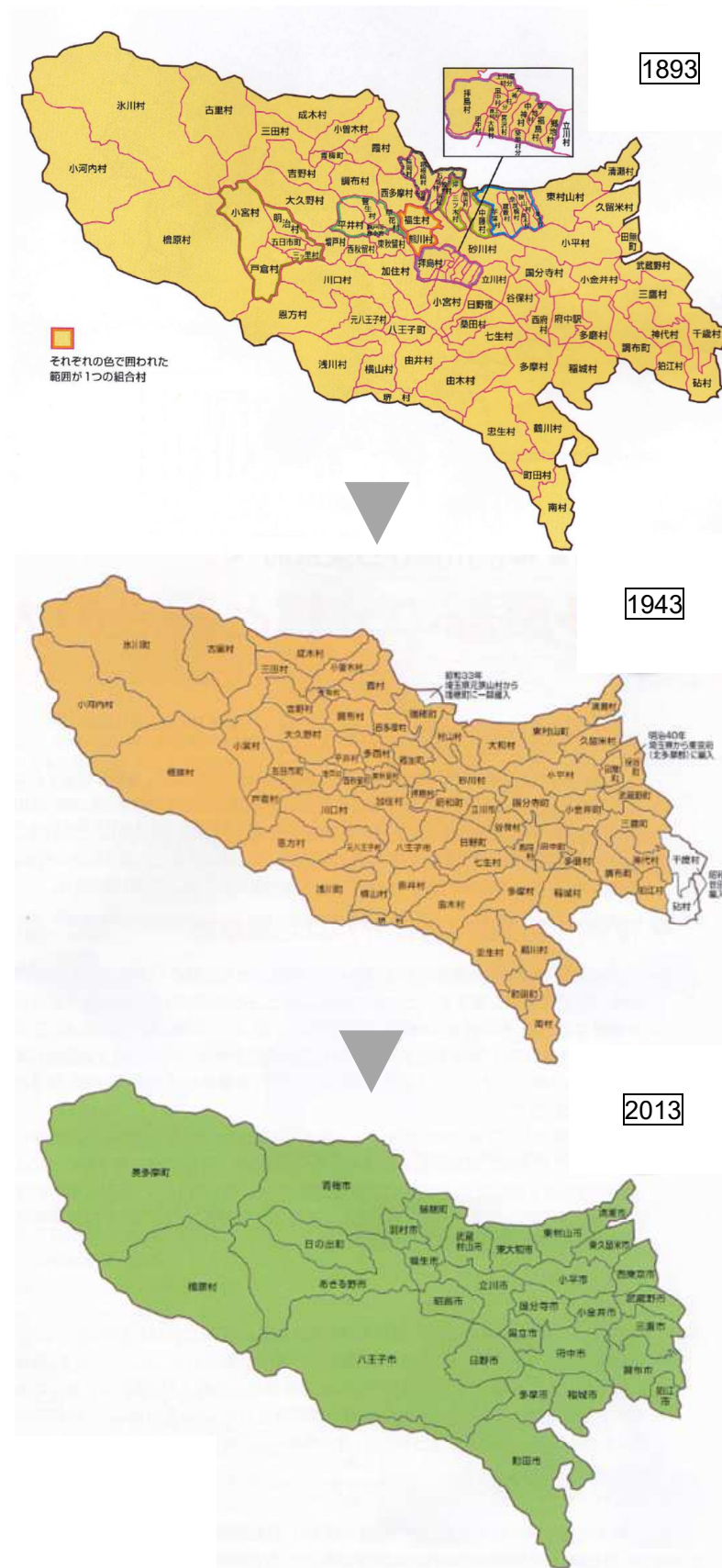
Fifth, during the pre-WWII period of the 1930s and 1940s, Tokyo's suburban territory served as a receptacle of military industries, which formed a base for current manufacturing industries (Ikeda, 1999). It is because their facilities, equipment and technical skills in military industries were suited to those in manufacturing industries. These military industries were supported by the extension of suburban railways.<sup>5</sup> In this way, physical and human capital accumulated before the WWII have contributed to the current suburban economy.

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<sup>3</sup> Originally, Tokyo's suburban territory was expected to become part of Tokyo Prefecture (Tokyo-fu) and Iruma District (Iruma-gun) at the timing of the abolition of feudal domains and establishment of prefectures in 1871. However, it was determined to belong to Kanagawa Prefecture, because it offered recreational areas for foreigners residing in a foreign settlement near the Yokohama Port (Hosaka, Umeda and Amano, 2014).

<sup>4</sup> There was a political issue concerned with this transfer. The governor of Kanagawa Prefecture who belonged to the ruling party requested this transfer to the mayor of Tokyo City, aiming to weaken the influential powers of politically opposed parties, whose politicians were mainly elected from Tokyo's suburban territory (M. Suzuki, 1993a).

<sup>5</sup> For details, see Tama no kōtsū to tōshikeiseishi kenkyūkai [A study group on railway and township development of the Tama Area] (ed.) (1995a, 1995b).



Source: Hosaka, Umeda and Amano (2014)

Figure 5-2 Chronology of Administrative Annexations within Tokyo's Suburban Territory

## **5.3 Urban Policies and Tokyo's Suburban Transformations after WWII**

### **5.3.1 Different Phases of Suburbanisation and Post-suburbanisation**

After the WWII, Tokyo's suburban territory has experienced different phases of suburbanisation and post-suburbanisation. Broadly, this process could be divided into four differentiated periods as follows: Phase 1) the early 1950s to the middle 1960s, Phase 2) the middle 1960s to the middle 1970s, Phase 3) the middle 1970s to the middle 1990s, and Phase 4) the middle 1990s to the present. Figure 5-3 depicts the chronological trends of the population of Tokyo's suburban territory (on the left y-axis) and the annual population growth rates of urban and suburban municipalities (on the right y-axis). During the early 1950s to the middle 1970s, namely the Phases 1 and 2, Tokyo's suburban territory had swiftly grown. During this period, Densely Inhabited Districts (DIDs) had rapidly expanded alongside land use conversion from agricultural use to urban use.<sup>6</sup> As illustrated in Figure 5-4, the DIDs had formed contiguous urbanised areas as of 1980, while being dispersed as of 1965. Then, after the first oil shock of 1973, the Japanese economy had entered the period of stable growth. During the middle 1970s to the middle 1990s, namely the Phase 3, Tokyo's suburban territory had steadily increased population and employment even at a slower rate. As shown in Figures 5-5 and 5-6, manufacturing production and commercial consumption had steadily increased until the collapse of the bubble economy in the early 1990s. During this period, the urbanisation process had shifted from urban sprawl to infill development, as evidenced by the fact that the DIDs had not significantly expanded. After the collapse of the bubble economy, Tokyo's suburban territory has faced the back-to-the-city movement, especially since the early 2000s. Simultaneously, manufacturing production and commercial consumption have continued to decline after the middle 1990s.

From an international comparative perspective, Tokyo's suburban territory has experienced rapid transitions among different phases of urbanisation. Serious damages by the WWII delayed the timing of suburbanisation partly because of the prioritised reconstruction of the metropolitan city centre. Nevertheless, the Greater Tokyo Area has swiftly grown to be the largest urban agglomeration in the world, bring together massive suburbanisation at an internationally unprecedented pace. Thus, Tokyo's suburban territory has now faced the back-to-the-city movement through the rapid transition from suburbanisation to re-urbanisation. Therefore, it is necessary to remember the rapidity of these transitions. In the following sections, urban policies for each of these four differentiated phases are explained in a step-wise manner.

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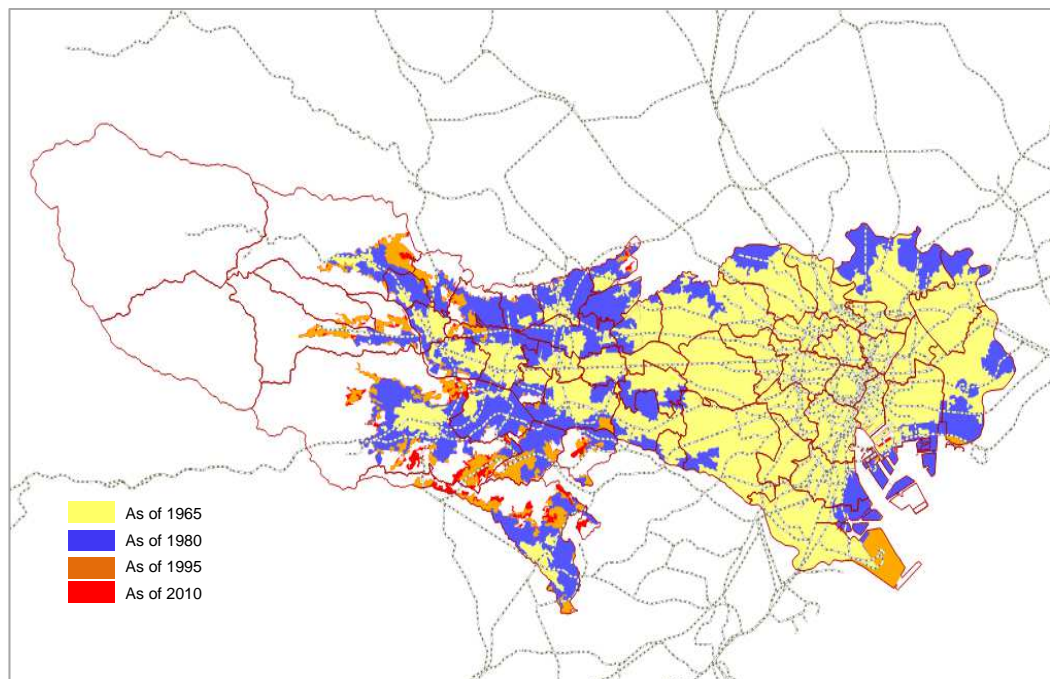
<sup>6</sup> The DIDs serve as one of urbanisation indicators, which is defined as continuous urbanised areas with a population of over 5 thousand and a population density of over 40 persons per hectare.





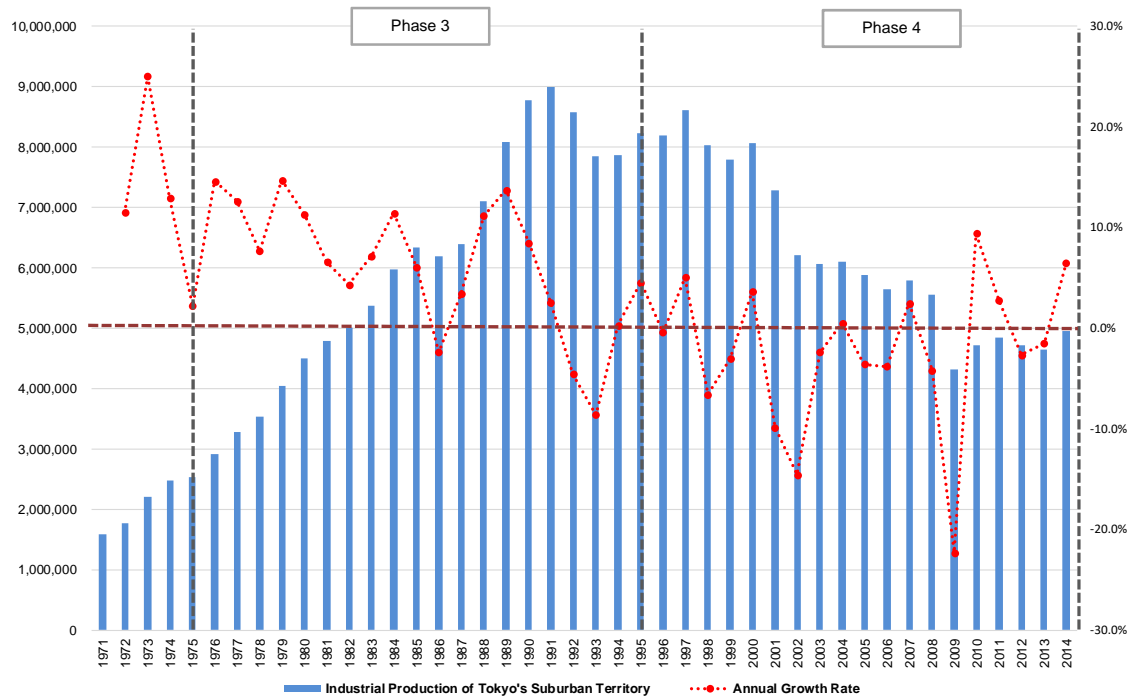
Source: Author's own, prepared with use of the Population Censuses

Figure 5-3 Past Trends of Urban and Suburban Populations after WWII



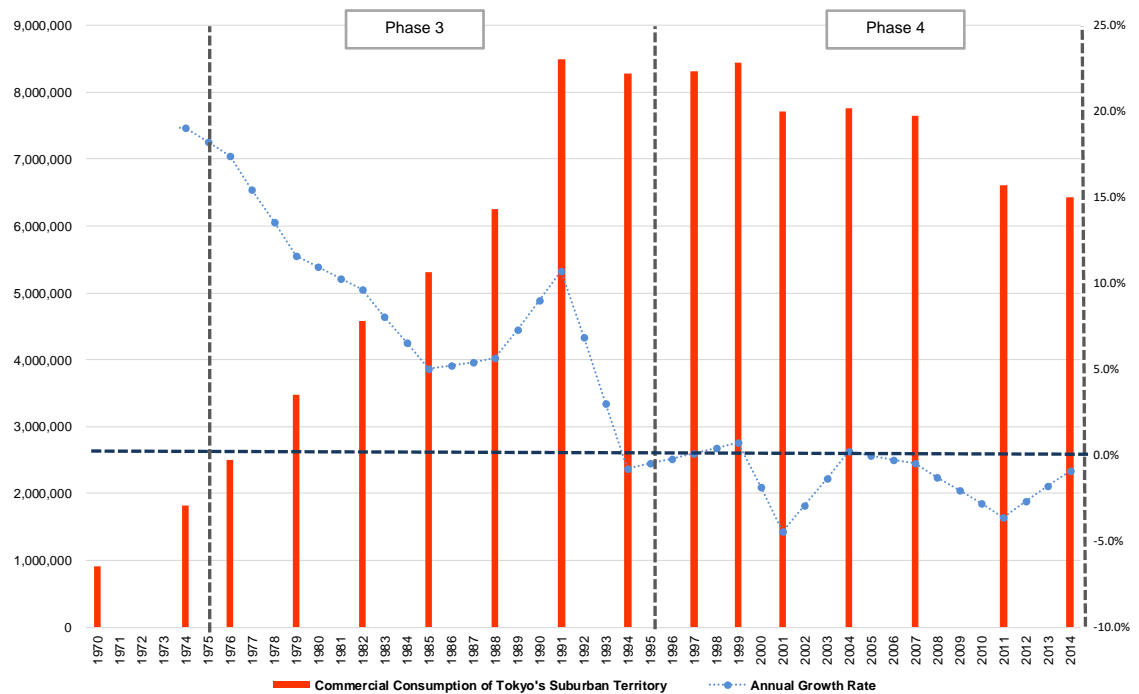
Source: Author's own, prepared with use of the DIDs data from MLIT

Figure 5-4 Historical Changes of DIDs after WWII



Source: Author's own, prepared with use of the Censuses of Manufacture

Figure 5-5 Past Trends of Manufacturing Production during 1970s to 2010s



Source: Author's own, prepared with use of the Censuses of Commerce

Figure 5-6 Past Trends of Commercial Consumption during 1970s to 2010s

### 5.3.2 Urban Policies at Each of Differentiated Urbanisation Phases

#### a) Rapid Metropolitan Growth and Massive Suburbanisation (Phase 1: Early 1950s to Middle 1960s)

Japan quickly recovered from enormous devastation by the WWII to achieve the rapid economic growth, known as the Japan Miracle. This was realised under the leadership of GOJ led by the Liberal Democratic Party of Japan (LDP), in which Prime Minister Mr. Ikeda announced a long-term economic development plan, called the Income Doubling Plan, in 1960. Through public interventions into the market, GOJ actualised an economic structural change “from light to heavy industries” with advantage of “imported technologies and inexpensive oil and raw materials from abroad” (Fujita and Tabuchi, 1997: 643-644). During this period, the First Comprehensive National Development Plan (CNDP) of 1962 was prepared under the Comprehensive National Land Development Act of 1956, in which a concept of the Pacific Belt Zone was proposed. Alongside this, large-scale infrastructure development projects were implemented, including a bullet train between Tokyo and Osaka opened just before the Tokyo Olympics in 1964.

During this period, massive residential suburbanisation occurred in Tokyo's suburban territory due to rural-to-urban migration into the Greater Tokyo Area for employment and educational opportunities. This suburbanisation took the form of urban sprawl before the enactment of the New City Planning Act of 1968 that established policy tools of Urbanisation Promotion Areas (UPAs) and Urbanisation Control Areas (UCAs). Suburban actors were dominated by profit-seeking private developers, who provided small-scale housing projects that created poor-quality living environments. Here, Tokyo's suburban territory could be conceived as a place of Molotch (1976)'s “growth machine”. Alongside this, pre-existing agricultural villages were integrated into expanding urbanised areas, as captured by McGree (1991)'s “Desakota Model”. Consequently, this specific (sub)urbanisation process facilitated scattered, leap-frogged developments, because “Japan farmers have tended to hold on to their land as long as possible, often maintaining it in active agricultural use long after it is ripe for development” (Sorenson, 2011: 216). It is partly because of an agricultural land reform by the US General Headquarters (during 1947 to 1950), which created fragmented land ownerships. Compared with US and European cities, this process resulted in relatively larger urbanised areas with more fragmented land uses and complicated land ownerships within Tokyo's suburban territory.

Under this situation, the First National Capital Region Development Plan (NCRDP) of 1962 was prepared under the National Capital Region Development Act of 1956 by the Ministry of Construction (presently, MLIT).<sup>7</sup> This first plan (with a projected population of 26.6 million for

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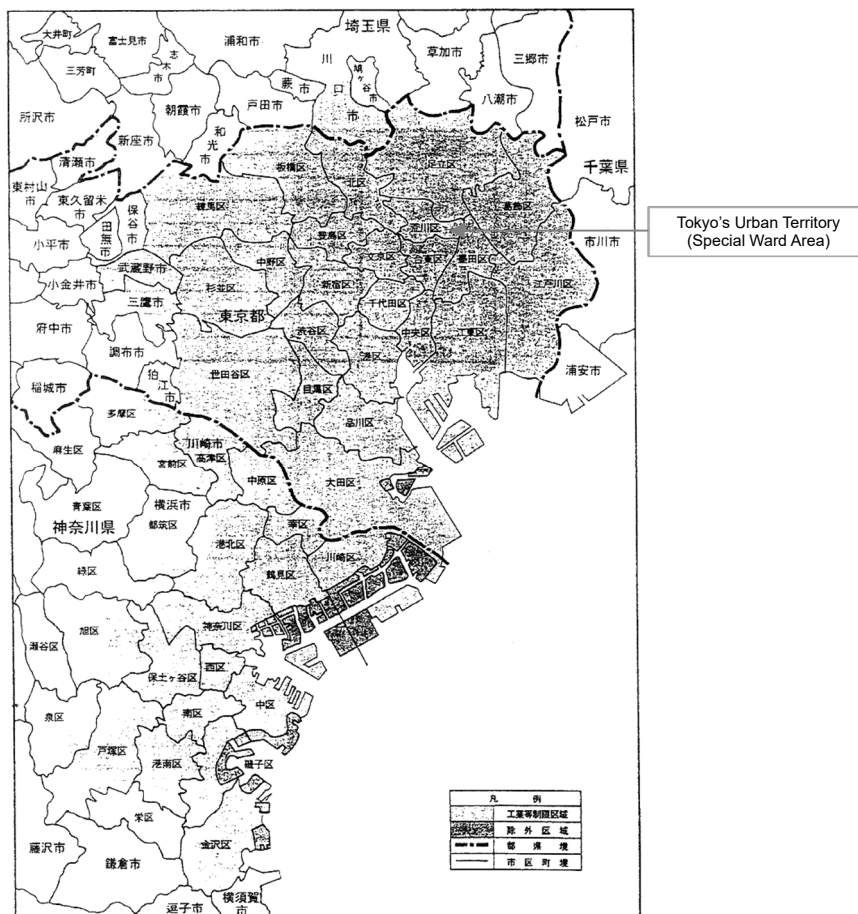
<sup>7</sup> The Comprehensive National Land Development Act of 1956 was abolished in the form of being replaced by the National Spatial Planning Act of 2005. This was made to shift from quantitative expansion-centred policies to quality improvement-centred policies (MLIT, 2009). In this situation, the CNDPs were no longer prepared. In replace, the Regional Plan of the Metropolitan Area was prepared in 2009 for the National Capital Region.

1975) targeted an area within about one hundred kilometres from the metropolitan city centre. It attempted to promote functional dispersion from existing urbanised areas. Referring to the Greater London Plan of 1944, this first plan divided the target area into the Existing Urban Areas, Suburban Areas (roughly corresponding to the current inner suburban territory) and Urban Development Areas (roughly corresponding to the current outer suburban territory), as shown in Figure 5-7. The greenbelt as an undevelopable area was planned in the form of being overlaid on the current inner suburban territory. Thus, satellite industrial cities aimed at ensuring proximity between job and residence were planned within the Urban Development Areas beyond the greenbelt; Hachioji City and Ome City were designated as industrial cities, as shown in Figure 5-8.

In the end, the greenbelt was not realised due to the harsh opposition of targeted suburban municipalities that feared the loss of development opportunities (Umeda, 1993). Consequently, the Suburban Areas were modified with its renaming into the Suburban Development and Redevelopment Areas, which aimed at balancing among development, redevelopment and preservation. This modification itself meant a failure to prevent development within the inner suburban territory. However, this led to the establishment of the suburban green area conservation system under the Law for the Conservation of Green Belts around the National Capital Region of 1966, as well as the productive green land system under the Act Concerning Agricultural Land, etc. Reserved in the Urbanisation Promotion Area of 1974. Consequently, agricultural lands have been preserved especially within Tokyo's inner suburban territory, albeit in a fragmented pattern. Whilst the greenbelt was not realised, satellite industrial cities were pursued by upper-level governmental entities; several industrial areas were developed within Tokyo's outer suburban territory, such as the Kita Hachioji Industrial Area (opened in 1963) in Hachioji City and the Nishi Tokyo Industrial Area (opened in 1966) in Ome City and Hamura City (Ikeda, 1999).



The first NCRDP attempted to push out manufacturing factories and university campuses into the suburban territory. For this purpose, the Law concerning Restriction on Factories in Existing Urbanised Areas of the Metropolitan Region of 1959 (now, abolished in 2002) was enacted to establish policy measures for the locational control of these functions.<sup>8</sup> Designated zones for this locational control almost corresponded to current Tokyo's urban territory, as shown in Figure 5-9. Consequently, alongside the dispersion of manufacturing factories, university faculties continued to open until the middle 1970s within Tokyo's suburban territory (Shirakawa, 2007); consequently, Hachioji City has become an academic city.



Source: Ministry of Construction (as for the picture, downloaded from Nippon Foundation Library's website: <https://nippon.zaidan.info/seikabutsu/1999/00924/contents/169.htm>)

Figure 5-9 Designated Zones for Locational Control of Manufacturing Factories and University Campuses

Alongside rapid metropolitan growth, there occurred a political and policy movement, in which GOJ attempted to establish a singular administrative entity, called the Capital Region Agency, which would entirely govern the National Capital Region. According to Miyake (2005a), a

<sup>8</sup> In designated zones, this law initially restricted the new opening and/or expansion of manufacturing factories each with a floor area of 1.0 thousand square metres and over, as well as those of universities each with 1.5 thousand square metres and over.

temporary administrative research committee prepared the report of opinions for the administrative reform of the National Capital Region in 1963 to recommend the following: 1) to establish the Capital Region Agency as a strong independent planning and coordination agency under the Cabinet Office, 2) to offer the agency a singular administrative jurisdiction for Tokyo Metropolis and neighbouring 7 prefectures, 3) to empower the agency with its own budgets and coordination powers, and 4) to make the agency prepare a comprehensive plan for the National Capital Region. However, this agency was not materialised due to disagreements among relevant governmental entities (Miyake, 2005a). Thus, this sort of singular administrative entity has not been actualised until now.

## **b) Planned Suburban Development through Strengthened Public Interventions (Phase 2: Middle 1960s to Middle 1970s)**

During this period, economic growth and rural-urban migration continued until the first oil shock of 1973. Consequently, Japan became a suburban nation a quarter of the century behind the US; thus, a suburban society has emerged in the Greater Tokyo Area primarily since the 1970s (Miura, 1995). The public sector began to make stronger interventions for suburban planning and development. For example, the New City Planning Act of 1968 was enacted to set up the UPAs and UCAs. Not only GOJ, but also TMG gradually engaged in suburban planning and development, as observed in the preparation of the first long-term plan of Tokyo Metropolis of 1963 under governor Mr. Higashi.<sup>9</sup>

The Second NCRDP of 1969 was prepared to promote the further dispersion of urban functions. This second plan expanded a target area into Tokyo Metropolis and neighbouring 7 prefectures, namely, the current National Capital Region. Following industrial and residential functions targeted in the first plan, this second plan pursued the distribution of academic and research functions into the suburban territory, as well as the further dispersion of industrial and residential functions into the outside of the Greater Tokyo Area. According to Motoki (2010), the Urban Development Areas were expanded to enable the relocation of large-scale factories within Tokyo's outer suburban territory. Consequently, manufacturing factories, such as those for automobiles, acoustic equipment and cameras, were constructed within outer suburban cities such as Hachioji City, Ome City, Hamura City, Fussa City and Akiruno City. These factories could take advantage of relatively cheap labours pooled during the past suburbanisation. However, at

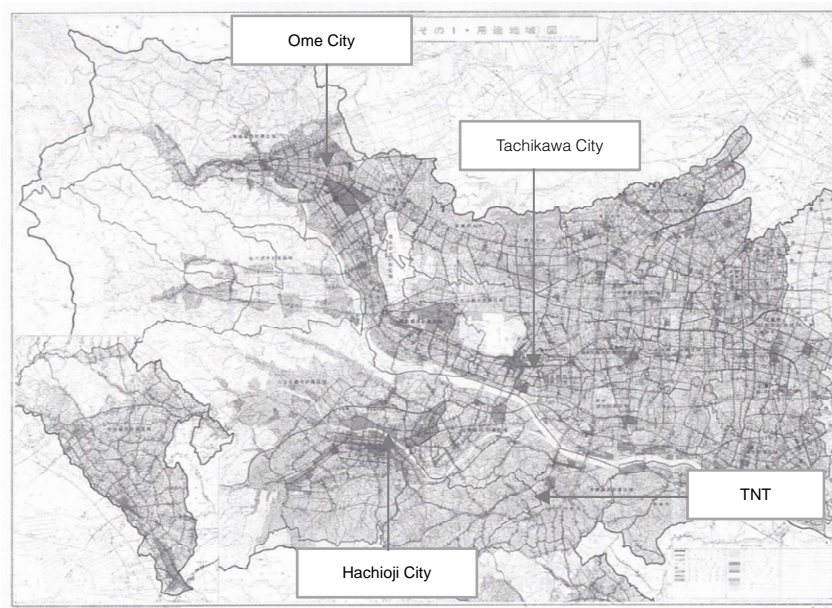
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<sup>9</sup> After the WWII, nine persons have become governors of Tokyo Metropolis. They are in a chronological order as follows: Mr. Seiichiro Yasui (1947-1959), Mr. Ryutaro Higashi (1959-1967), Mr. Ryoichi Minobe (1967-1979), Mr. Toshikazu Suzuki (1979-1995), Mr. Yukio Aoshima (1995-1999), Mr. Shintaro Ishihara (1999-2012), Mr. Naoki Inose (2012-2013), Mr. Yoichi Masuzoe (2014-2016), and Ms. Yuriko Koike (2016-Present). Here, the parenthesis denotes the term of office. According to Sasaki (2011), governors can have strong authorities and powers in metropolitan affairs including the formulation and implementation of policies, drafting of annual budget plans and enactment of prefectural-level ordinances. There are mainly four reasons. First, governor is directly elected by qualified voters. Second, governor has huge discretionary powers as the top of TMG with a large budget scale of twelve trillion Yen (comparable to the national budget scale of the Republic of Korea) and many staffs of about 170 thousand. Third, governor can concentrate on his or her duties during a fixed four-year term secured under the presidential system (in contrast to the prime minister under the parliamentary cabinet system). Finally, governor can enforce leadership under the independent system (in contrast to the prime minister under the collegial system) (Sasaki, 2011).



the early stage, these factories served only as supporting backbones for heavy industries in the Keihin Industrial Zone along the metropolitan coast line, making less contributions to the formation of industrial linkages with local SMEs (Motoki, 2010). Subsequently, the Third NCRDP of 1976, which was prepared under the National Land Agency (established in 1974, and then disassembled in 2001), suggested the dispersion of core functions within the metropolitan city centre, such as governmental entities (Togo, 1993). In this way, during the first plan to the third plan, targeted functions for dispersion were expanded in the following order: housing, manufacturing factories, warehouses and distribution centres, R&D facilities and university campuses.

Not only GOJ, but also TMG began to propose their own spatial planning and development. A new land use zoning for Tokyo's suburban territory was designated in the late 1960s, as shown in Figure 5-10. TMG announced the Tokyo Concept Plan of Plaza and Blue Sky of 1971 [Hiroba to aozora no Tokyo-kōsō] under governor Mr. Minobe (during 1967 to 1979).<sup>10</sup> This plan envisaged a spatial planning and development concept of 'Twin Cores' consisting of Tokyo's urban and suburban territories, as illustrated in Figure 5-11. It attempted to abbreviate the uni-polarisation of the metropolitan city centre by making better urban-suburban balances.

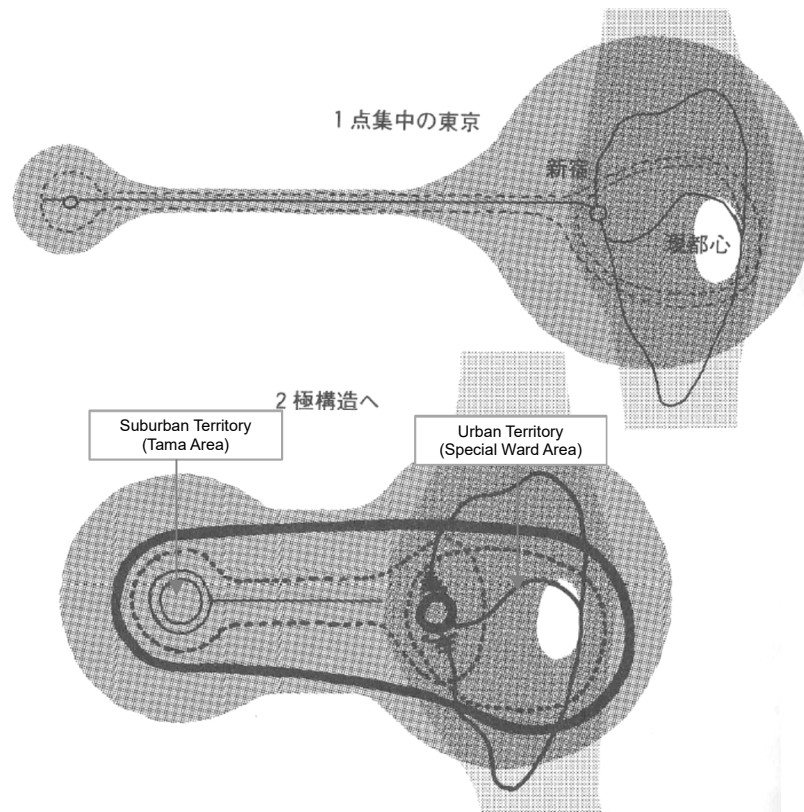


Source: Ikeda (1999)

Figure 5-10 New Land Use Zoning for Tokyo's Suburban Territory as of 1969

<sup>10</sup> Mr. Minobe who was an academic scholar as a marxist economist created a reformist metropolitan government. Shifting from infrastructure development, he stressed social welfare improvement and made relevant achievements, such as free medical care services for elderly people and the enactment of a prefectural-level local ordinance for pollution prevention (Yamazaki, 2002).





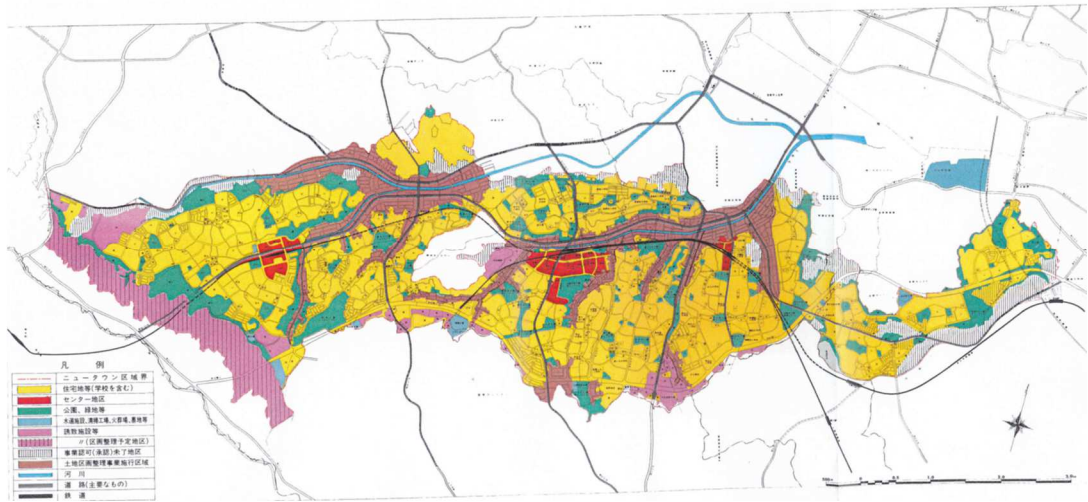
Source: Togo (1993)

Figure 5-11 Concept of Twin Cores in Tokyo Concept Plan of Plaza and Blue Sky of 1971

Under this situation, governmental and para-governmental entities actively implemented township or housing development projects in Tokyo's suburban territory. As the most famous new town, TNT began to be implemented since 1966 by various entities such as the Housing and Urban Development Corporation which is currently the Urban Renaissance Agency (UR), TMG and the Tokyo Metropolitan Housing Corporation (see Figures 5-12 and 5-13). It was planned to have a development area of about 2.9 thousand hectares and a population of about 3.4 hundred thousand, stretching over Inagi City, Tama City, Hachioji City and Machida City. It began in 1971 to accommodate middle-class families. However, it was initially planned as a dormitory town under the New Housing and Urban Development Act of 1963 that did not initially allow office development. Therefore, the inducement of business functions into TNT needed to be waited until its revision in 1986 (Takahashi, 1998).

Simultaneously, infrastructure development was promoted to ensure the easiness of suburban-to-urban commutes and tackle aspects of the automobile-reliant society primarily since the middle 1960s. Arterial roads were networked by GOJ and TMG, and railways mainly by private-sector railway corporations. These strengthened public interventions widened the opportunities of private-sector investment. Private-sector railway corporations implemented residential development projects by purchasing railway-side lands at cheaper prices prior to railway construction, playing dual roles as railway operators and residential developers. These

developments of both public and private sectors led to the strengthening of suburban functions as commuting places to Tokyo's urban territory. Simultaneously, owing to increased suburban population, Tokyo's suburban territory became a place of mass consumption (Yoshida, 2010).



Source: TMG (1982)

Figure 5-12 TNT Development Plan



Source: Tama New Town Society (<http://www.tama-nt.org/?p=1070>)

Figure 5-13 TNT City Centre in Tama City

Moreover, urban-to-suburban migration was accelerated by preferences for the ownership of detached houses in the suburban environment. According to Hirayama (2009), this housing preference was encouraged by GOJ aimed at forming an ownership society. There was a property ladder, called the Jūtaku-sugoroku, which represents a typical trend of housing moves at different stages of life, although being recently changing due to diversified societal values. In this trend, people started from small rent houses or company housing in their 20s, through large

rent houses or condominiums in their 30s, to owned detached houses in their 40s. This housing policy was strategically linked with economic development policies, because housing purchases could, through ripple effects, stimulate the consumption of relevant goods such as house furnishings and home electronics. This was sustained by para-governmental entities, namely the Housing Loan Corporation in 1950 (now, reorganised into the Japan Housing Finance Agency in 2007) and the Japan Housing Corporation in 1955 (now, merged into the UR in 2004). Thus, this housing policy continued to be one measure for economic development until the middle 1990s, especially during the period of stable growth (Hirayama, 2009).

According to Chiikisōgōkenkyūjo (ed.) (1989), the suburban way of life in Tokyo Metropolis was Americanised, since middle-class families were affected by an imported way of suburban life from the US. Fulltime housewives, who became keen to democracy through higher education, played a key role in suburban community activities, whilst their husbands were centred on their companies in the urban territory. Their activities subsequently turned to be citizenship movements or grassroots lobbying that propelled municipal governments to construct better public facilities, especially for childrearing and education. Moreover, Tokyo's suburban territory came to have a specific suburban landscape as a mixture of newcomer and traditional communities through the urban-to-suburban migration of middle-class groups (Chiikisōgōkenkyūjo. ed., 1989). It is assumed that three-fourths of the current suburban population is rooted in newcomer communities, and one-fourths is rooted in traditional communities (Ike, 2015). Newcomer communities are mostly households consisting of salarymen commuting to urban workplaces and full-time housewives. By contrast, traditional communities are mostly households engaging in family-owned local businesses of agricultural, commercial and/or industrial activities. Thus, newcomer communities could be characterised by weaker autonomous and territorial connections, white-colour workers and higher sensitivity to US and European cultures. By contrast, traditional communities could be characterised by stronger autonomous and territorial connections, blue-colour workers and stronger respects towards traditions. This integration process between newcomer and traditional communities has produced locally differentiated areas, each with specific social and cultural values (Chiikisōgōkenkyūjo. ed., 1989).

In these ways, industrial and residential dispersion was continuously facilitated. However, office functions were not targeted for dispersion. According to Miyake (2005a), the locational control of office functions began to be debated in the 1970s. However, the third NCRDP of 1976 could not proactively cope with office dispersion, partly due to changes in the economic situation, including the first oil shock of 1973. In fact, a report of the capital region development committee announced in 1972 suggested the necessity of development permission and levy systems concerned with offices. Whilst a law for office locational control was drafted, only the levy system was remained; in the end, business office tax was established as a local tax in 1975. However,

drastic countermeasures for office dispersion were not implemented, differently from the UK.<sup>11</sup> Consequently, concrete actions about the dispersion of office functions needed to be waited until the Capital Reform Plan (Shuto-kaizō-keikaku) of 1985 (Miyake, 2005a).

**c) Formation of Self-contained Suburban City-regions (Phase 3: Middle 1970s to Middle 1990s)**

The Japanese economy recovered through private-sector investments for facilities and equipment, and then entered the period of stable growth after the first and second oil shocks of 1973 and 1979. This stable growth continued until the collapse of the bubble economy in the early 1990s. The experiences of the oil shocks “forced Japanese industries to become more energy efficient and more competitive internationally” by switching “from heavy industries to high-tech and service industries” (Fujita and Tabuchi, 1997: 644). Consequently, the Japanese economy has shifted an industrial mode from the Fordist into the post-Fordist, resulting in the economic restructuring of Tokyo’s suburban territory. According to Motoki (2010), suburban manufacturing factories were functionally converted from production plants into R&D facilities after the late 1970s, because production functions were dispersed into the provincial areas of Japan or NICs. To promote nation-wide industrial dispersion, GOJ enacted the Act for Accelerating Regional Development Based upon High-Technology Industrial Complexes of 1983 which aim to form advanced technology cities, called the ‘Technopolis’, across the nation (Takeuchi, 2010). Simultaneously, within Tokyo’s suburban territory, this conversion from production plants into R&D facilities contributed to the localisation of industries through large-scale enterprises’ outsourcing of part of R&D activities to local SMEs (Motoki, 2010).

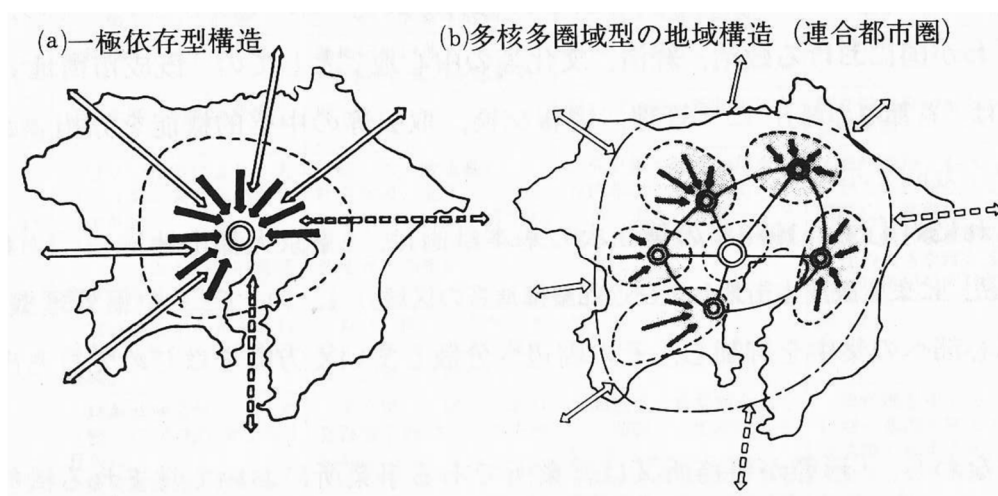
Residential and industrial suburbanisation continued alongside suburban economic restructuring. Land prices within the metropolitan city centre escalated after the Plaza Accord on exchange rates in 1985, partly because cheap Japanese Yen promoted foreign direct investments in the real estate sector especially within Tokyo’s urban territory. Due to the appreciation of land prices, people who could not afford high living costs within Tokyo’s urban territory were pushed out into the suburban territory. Consequently, Tokyo’s suburban population steadily increased alongside a doughnut phenomenon with population decline in the urban territory.

Entering the post-Fordist era, GOJ has pursued the formation of a polycentric metropolitan structure within the Greater Tokyo Area, and TMG has also pursued this polycentric formation within Tokyo Metropolis. This spatial planning and development concept of polycentricity was officially announced in the Fourth NCRDP of 1987, which was prepared by the aforementioned

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<sup>11</sup> Compared with Japan, UK took stronger policy interventions for office dispersion in the 1960s, using the development permission system through the Location of Offices Bureau set up in 1963 (Hall and Tewdwr-Jones, 2010). Even though this office locational control was later relaxed, London has to some extent achieved the dispersion of command-and-control functions, in which some headquarters of manufacturing companies reside in the suburban territory in the form of being adjacent to R&D facilities.

National Land Agency. This concept was based on the aforementioned Capital Reform Plan of 1985, which was not a statutory plan; this plan aimed to improve 'suburban self-containment' through the formation of multi-polar, self-contained city-regions with suburban centres, as shown in Figure 5-14.



Source: Togo (1993)

Figure 5-14 Multi-polar, Self-contained City-regions in Capital Reform Plan of 1985

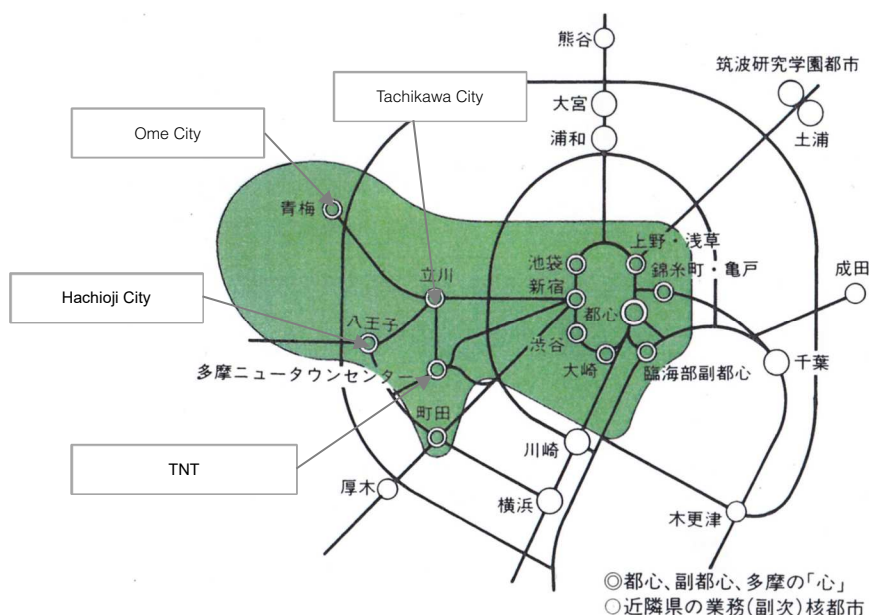
More precisely, TMG prepared the First Long-term Plan of Tokyo Metropolis of 1982, as well as the Second Long-term Plan of Tokyo Metropolis of 1987, under governor Mr. Suzuki (during 1979 to 1995) (TMG, 1982, 1987).<sup>12</sup> These plans aimed at the formation of a multi-core urban structure (Tashingata-toshikōzō) within Tokyo Metropolis; a revised multi-core urban structure in the second plan is shown in Figure 5-15. In these plans, suburban centres named the 'hearts of the Tama Area' were pursued to achieve 'suburban self-containment'.<sup>13</sup> As Togo (1993) notes, the first plan was incorporated into the Capital Reform Plan of 1985 through close coordination between TMG and the National Land Agency, owing to Mr. Suzuki's connections with GOJ. Then, the Capital Reform Plan of 1985 was incorporated into the Fourth NCRDP of 1987. In this sense, TMG substantially took the lead in the debate of polycentricity (Togo, 1993). Simultaneously, a grandiose plan of the Tama Monorail, as the suburb-to-suburb Mass Rapid Transit system with a planned length of about 93 kilometres was announced, as shown in Figure 5-16.<sup>14</sup> Later, part of the Tama Monorail with a length of 16 kilometres was implemented in the form of passing through Tachikawa City, as shown in Figure 5-17; the section between Kamikitadai Station and Tachikawa-Kita Station opened in 1998, and that between Tachikawa-Kita Station and Tama Centre Station in 2000.

<sup>12</sup> Mr. Suzuki served as the top bureaucrat of the Ministry of Home Affairs (presently, MICA) during 1950 to 1958, Deputy Chief Cabinet Secretary of Prime Minister Kishi's cabinet in 1958, and deputy governor of Tokyo Metropolis during 1959 to 1967.

<sup>13</sup> A report on the regional development of Tokyo's suburban territory, which was announced in 1986 by TMG, suggests the following three pillars for the promotion of 'suburban self-containment': 1) to promote economic self-sufficiency and improve functional sufficiency, 2) to create inimitable living environments, and 3) to decentralise powers and responsibilities and strengthen local governance (Eto, 1995).

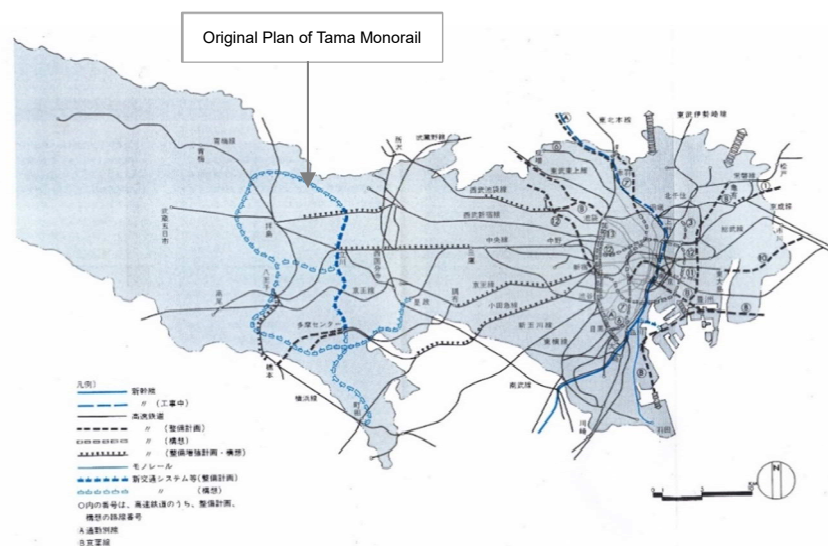
<sup>14</sup> The Tama Monorail was initially envisioned with a planned length of about 16 kilometres in the long-term plan of Tokyo Metropolis announced in 1973 under governor Mr. Minobe (F. Suzuki, 1995).

According to Sasaki (2011), governor Mr. Suzuki pursued economic growth rather than social welfare improvement stressed by governor Mr. Minobe. Subsequently, policy and planning directions of Tokyo Metropolis repeatedly swung like a pendulum between economic growth and social welfare improvement, depending on governor's thoughts and actions (Sasaki, 2011). Consequently, Tokyo's suburban territory has been exposed to the fluctuation of the policy and planning directions of TMG.



Source: TMG (1987)

Figure 5-15 Multi-core Urban Structure in Second Long-term Plan of Tokyo Metropolis of 1987



Source: TMG (1982)

Figure 5-16 Original Plan of Tama Monorail in First Long-term Plan of Tokyo Metropolis of 1982





Source: Tachikawa City Government ([www.city.tachikawa.lg.jp/koho/shise/gaiyo/shokai/gaiyo.html](http://www.city.tachikawa.lg.jp/koho/shise/gaiyo/shokai/gaiyo.html))

Figure 5-17 Tama Monorail Passing through Tachikawa City

Following the Fourth NCRDP of 1987, GOJ enacted the Act on the Promotion of Multi-polar Pattern National Land Formation of 1988 to legitimate an institutional framework for polycentric formation, namely policy measures for the BCCs. Concrete policy measures for office dispersion were for the first time legitimated in this act (e.g. Togo, 1993; Miyake, 2005a). These measures for the BCCs intended to form suburban centres located between 30 to 40 kilometres from the metropolitan city centre, which are at “a considerable distance from the old central area” (Sorenson, 2001b: 29). The BCCs can be regarded as subordinate centres to urban subcentres within Tokyo’s urban territory, such as Shinjyuku, Shibuya, and Ikebukuro Subcentres alongside the JR Yamanote Line. The measures for the BCCs include the following: 1) tax relaxation for core facilities to be developed by the private sector, 2) public supports for private-sector investment for core facilities with non- or low-interest-rate loans from GOJ-related banks, and 3) preferential measures for municipal bonds for the development of publicly-built and privately-operated core facilities. These do not include direct subsidies from GOJ. Within Tokyo’s suburban territory, the five suburban cities of Tachikawa City, Hachioji City, Ome City, Machida City and Tama City are currently designated as the BCCs.<sup>15</sup> For instance, Hachioji City and Tachikawa City were designated by the Fourth NCRDP of 1986, and Tama City was newly added by the Fifth NCRDP of 1999. The current basic plan of the Hachioji-Tachikawa-Tama BCCs was prepared by TMG and relevant municipal governments, and then co-approved in 2002 by in-charge ministers (TMG, 2002). The current basic plan of the Ome BCCs was co-approved in 2009 (TMG, 2009a). However, criticism about policy measures for the BCCs has existed. For example, Miyake (2005a) points out the lack of swift governmental actions to institutionalise a workable system for office dispersion, suggesting that it took a few more years to establish the

<sup>15</sup> For designation, a given prefectural government and relevant municipal governments need to prepare a basic plan for the BCCs, and then obtain an approval about the plan from in-charge ministers. In the plan, districts for the agglomeration of business facilities need to be designated within the BCCs, and core facilities to be developed by public and/or private sectors within these districts need to be listed. These core facilities need to be classified into the following categories: 1) research, 2) information processing, 3) telecommunication and broadcasting, 4) exhibition and trade fair, 5) training and conference, 6) transportation, 7) intelligent building, 8) logistic distribution, 9) culture, 10) sports and recreation, and 11) multi-purpose use.

measures for the BCCs in 1988 after the official announcement of polycentricity in 1986. Moreover, it took a few more years to actually designate the BCCs due to the delayed preparation of relevant basic plans. In fact, the first approval was given for the Chiba BCCs in 1991, namely around the end of the bubble economy (Miyake, 2005a).

At prefectural level, TMG has fostered suburban centres under the concept of the multi-core urban structure. This concept was taken over by subsequent plans such as the Tokyo Plan 1995 and the Tokyo Vision for Livable City of 1977 under governor Mr. Aoshima. As such, polycentricity has been officially pursued since the 1980s by upper-level governmental entities. Yet, governor Mr. Suzuki promoted the development of large-scale subcentres within Tokyo's urban territory, rather than suburban centres within the suburban territory. His projects include the Shinjuku Subcentre and Tokyo Water Front City mainly in the late 1980s and 1990s (see Figures 5-18 and 5-19). In this process, the administration building of TMG was relocated in 1991 from the Marunouchi Area into the Shinjuku Subcentre (Togo, 1993).



Source: Geomedian (<http://komekami.sakura.ne.jp/archives/702/pa049057>)

Figure 5-18 Shinjuku Subcentre within Tokyo's Urban Territory





Source: Geomedian (<http://komekami.sakura.ne.jp/archives/114/p7122659>)

Figure 5-19 Tokyo Water Front City within Tokyo's Urban Territory

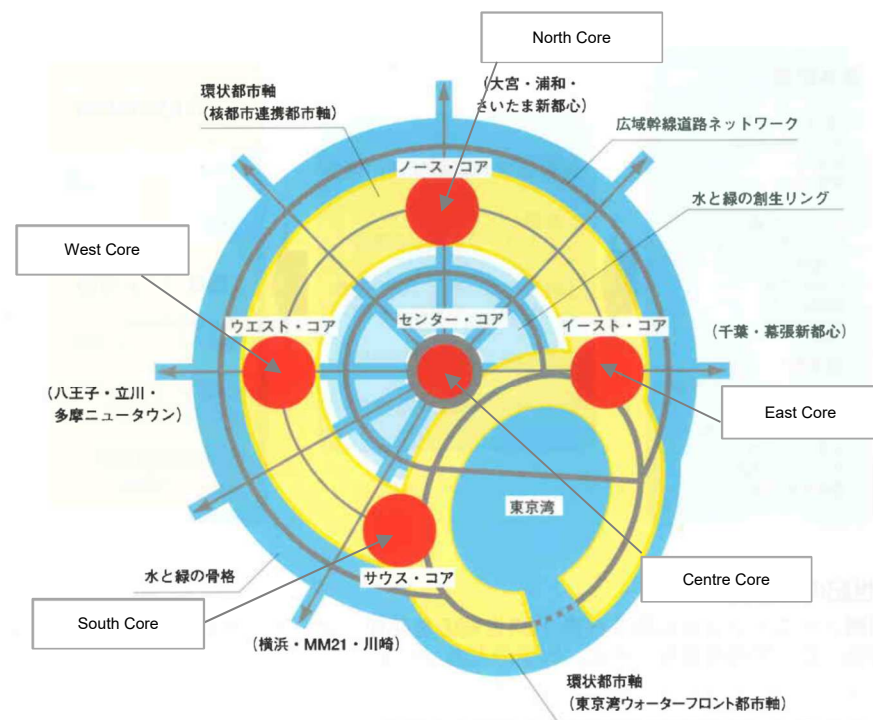
#### **d) Global Competitiveness Agenda and Back-to-the-city Movement (Phase 4: Middle 1990s to Present)**

The bubble economy collapsed in the early 1990s. This collapse was triggered by GOJ's decision on the control of the total volume of money circulation, which was notified in 1990 by the Ministry of Finance. This decision seriously damaged investment activities. Then, Japan has begun to suffer economic recession and long-lasting deflation, as often expressed by the term 'Lost Decade'.

During this period, the National Diet activated a debate about the relocation of capital functions from Tokyo Metropolis, even though this sort of debate initially appeared in the Third NCRDP of 1976. The continued uni-polarisation of Tokyo Metropolis was criticised under widened imbalances between Tokyo Metropolis and provincial areas. The Great Hanshin-Awaji Earthquake of 1995 and other accidents shed light on a risk of this unipolar concentration, which might result in a possible paralysis of political and administrative affairs in case of emergency. Therefore, GOJ enacted the Law concerning Relocation of the National Diet and Related Organisations in 1992. Afterwards, the Special Committee on Relocation of the National Diet and Related Organisations was set up in 1996 to continue this debate, and finally proposed candidate sites for capital relocation in 1999 to Prime Minister Mr. Obuchi. Inevitably, this debate created a sense of crisis for TMG and neighbouring prefectural governments, because capital relocation would degrade the political, economic and social status of the Greater Tokyo Area.

In this situation, governor Mr. Ishihara (during 1999 to 2012) emphasised the importance of strengthening the Greater Tokyo Area for international competitiveness, together with the

governors of neighbouring prefectures.<sup>16</sup> In this vein, the Tokyo Vision 2000 was announced in 2000 by TMG, in which a new spatial planning and development concept, called the Ringed Megalopolis, was proposed (TMG, 2001), as shown in Figure 5-20. This concept comprises the Centre Core (Marunouchi, Shinjuku, Shibuya, Ikebukuro Subcentres, etc.), South Core (Yokohama City, Kawasaki City and the Minato Mirai 21 in Kanagawa Prefecture), East Core (Chiba City and the Makuhari New Urban Centre in Chiba Prefecture), North Core (Omiya City, Urawa City and the Saitama New Urban Centre in Saitama Prefecture) and West Core (Hachioji City, Tachikawa City and TNT).<sup>17</sup> A remarkable difference from the previous plans of TMG is that this concept targets the entire Greater Tokyo Area, which is wider than the administrative area of TMG. As Taira (2002) notes, this concept emerged from a political movement as an opposition campaign against the national-level debate about capital relocation. Therefore, rather than seriously actualising this concept, it was a counter idea against GOJ. Consequently, this concept has faced the difficulty of coordination between TMG and neighbouring prefectural governments, failing to bring out concrete outcomes (Taira, 2002). Thus, this debate about capital relocation at GOJ almost vanished after Mr. Koizumi became the prime minister in 2001, who stressed urban regeneration in the metropolitan city centre under the global competitiveness agenda. In the end, this policy direction of GOJ became aligned with the intention of governor Mr. Ishihara and relevant governors.



Source: TMG (2001)

Figure 5-20 Ringed Megalopolis in Tokyo Vision 2000

<sup>16</sup> Mr. Ishihara was a national-level politician belonging to the LDP, and served as the minister of the Ministry of Transport (presently, MLIT) during 1987 to 1988.

<sup>17</sup> The South, East and North Cores have larger suburban centres, compared with the West Core. According to Oki (2011), these suburban centres were actualised not only by the top-down process of GOJ, but also by the bottom-up movement of prefectural and municipal governments (Oki, 2011).

To escape from economic stagnation, GOJ led by Prime Minister Mr. Koizumi's cabinet (during 2001 to 2006) began to stress the revitalisation of the metropolitan city centre, and implemented various structural reforms underpinned by a free market-centralised approach, such as deregulation, privatisation and the fluidisation of labour market since the early 2000s. According to Hatta (2006), private-sector investment-led urban renewal has come to the fore in the political and policy regime of GOJ. In this vein, the Urban Renaissance Headquarters was established under the Cabinet Office in 2001. Thus, deregulations related to urban renewal have been made, resulting in the more market-liberal-oriented spatial environment within the Greater Tokyo Area. For details, GOJ enacted the Act on Special Measures concerning Urban Regeneration in 2002 and made the 2002 revision of the Building Standards Act and Land Readjustment Act, aiming to ensure more flexibilities for development and building activities. Simultaneously, a new system was established to enable private developers to spontaneously propose development projects to the government sector. Moreover, the Law concerning Restriction on Factories in Existing Urbanised Areas of the Metropolitan Region of 1959 was abolished in 2002 (Hatta, 2006). These deregulations have been successful to promote private-sector investment especially within Tokyo's urban territory, in which private developers can increase their profitability with advantage of regulation relaxations, including increases in allowable Floor Area Ratios (FARs) (Hatta, 2006).

Simultaneously, financial liberalisation and real estate securitisation have been promoted since after the 2000 revision of the Act on Investment Trusts and Investment Corporations of 1951. Then, Japanese Real Estate Investment Trusts (J-REITs), which have served to "embody the most mobile form of bridging finance capital to real estate" (Aveline-Dubach, 2014b: 266-267), begun to be listed on the Tokyo Stock Exchange in 2001. Afterwards, financial resources, including those from foreign investors, have increasingly flowed into real estate which has served as "a medium for investment and a major input to the productive capacity of the economy" (Aveline-Dubach, 2004: 10). Planning and financial deregulations, including increased FARs, have led to increasing the values of land which can be utilised as collateral for financial arrangements for new investments or re-investments. Consequently, the role of land has increasingly become important for private-sector investments, especially from the perspective of the relationship between real estate and finance (Aveline-Dubach, 2014b). Thus, property investments for securitised real estate have tended to take place in advantageous areas with higher land prices and higher densities of population and employment (Kikuchi and Tani, 2013), leading to more private-sector investments within Tokyo's urban territory through the "hyper-centralized patterns" (Aveline-Dubach, 2014b: 268) of property investment.

In these ways, the political and policy shift towards the metropolitan city centre have promoted private sector-led urban renewal within Tokyo's urban territory. Even now, the Marunouchi Area near JR Tokyo Station has continued to grow through on-going urban redevelopment projects (see Figure 5-21). Other projects have still undergone within Tokyo's urban territory for the Tokyo

Olympics 2020. For instance, GOJ and TMG has collaboratively worked for the strengthening of transport connections to the international society, such as railway extensions to the Haneda Airport. Yet, the shift towards the metropolitan city centre has triggered the strong back-to-the-city movement in terms of both workplace and residence. Consequently, although the back-to-the-city movement paralleled urban-to-suburban migration in the 1990s, it has become dominant since the early 2000s (Yamagami, 2003; Ushijima, 2005).



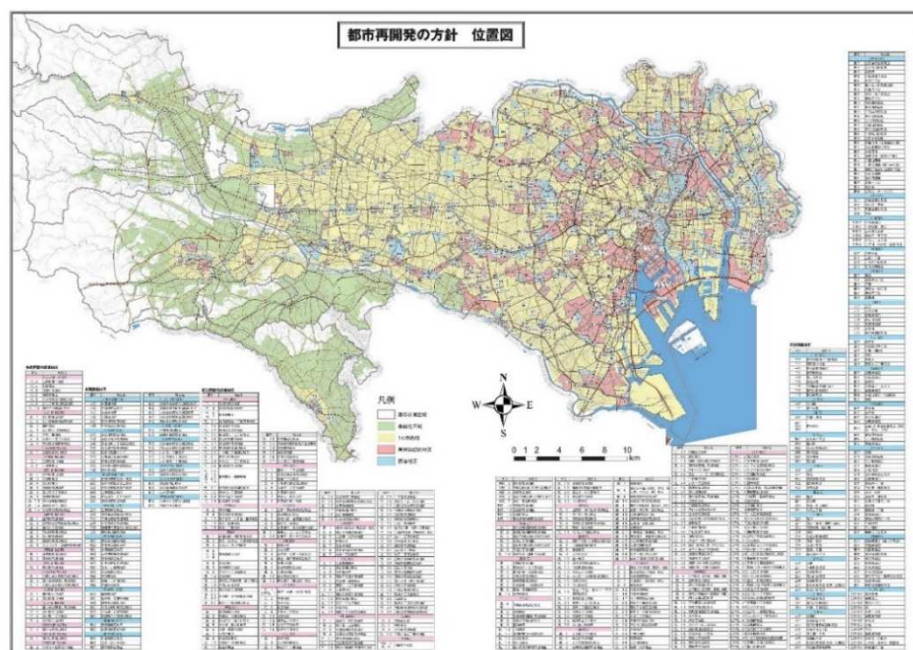
Source: Geomedian (<http://komekami.sakura.ne.jp/wp-content/uploads/p8074820.jpg>)

Figure 5-21 Marunouchi Area near JR Tokyo Station

As for the re-concentration of residence, it has been caused by the following factors. First, young generations who grew up in suburban areas have preferred to purchase their owned houses within urban areas or inner suburban areas to reduce long commutes (Cabinet Office, 2011; MLIT, 2006; Simizu, 2007). Second, university students have tended to reside in the urban territory with many universities (TMG, 2003). Third, some elderly people have tended to buy condominiums in convenient urban areas (Okada, 2014). Fourth, alongside increased women's participation in society, single females have tended to reside in urban areas (Wakabayashi et al., 2002). Consequently, suburban-to-urban migration has steadily increased alongside decreased urban-to-suburban migration. Now, the inner suburban territory has experienced more housing construction of all types than the outer suburban territory. That is, the outer suburban territory has no longer been a place for young generations to purchase their own detached houses. Simultaneously, the volume of in-migrants from provincial areas into Tokyo Metropolis has been stable, regardless of decreased out-migration from Tokyo Metropolis (Ezaki, 2006). Consequently, the population of Tokyo's urban territory has steadily increased.

As for the re-concentration of workplace, offices have re-moved from the suburban territory into the urban territory. This is mainly due to locational advantages for face-to-face communications and reduced office rents within the urban territory. Urban redevelopment projects since the early 2000s have enormously supplied office floor spaces especially within the metropolitan city centre. This supply has reduced rent costs enough to enable suburban offices, even those in the BCCs, to move back into the metropolitan city centre (H. Sato, 2010, 2016). According to Oki (2011), the BCCs seems relatively unsuccessful, as indicated by the fact that occupancy rates against originally planned frameworks are about 30 to 40 percent on average. He suggests the following reasons: 1) limited policy measures for the BCCs, 2) the non-implementation of strong regulations related to office locational control, 3) local governments' inactivity for attracting private enterprises, and 4) insufficient interactions among private enterprises within the BCCs due to the less agglomeration of economies. Consequently, the benefits of face-to-face communications within the metropolitan city centre has exceeded the locational advantages of suburban spaces, such as cost saving by lower office rents. Consequently, the employment of Tokyo's urban territory has continually increased (Oki, 2011).

Under the strong back-to-the-city movement, GOJ has pursued the compact city strategy. Compactisation has been promoted at two different spatial scales, namely metropolitan-wide compactisation led by upper-level governments and local-wide compactisation by municipal governments. In this vein, GOJ made the 2015 revision of the Act on Special Measures concerning Urban Reconstruction of 2002 to introduce new statutory planning instruments that enable municipal governments to designate smaller zones for spatial and functional consolidation within the inside UPAs. Other relevant policy measures have been made, including the 2015 revision of Urban Renewal Act of 1969, the 2007 revision of the Act on Special Measures concerning Promotion of Supply of Houses and Housing Lands in Urban Districts of 1975, and the 2014 revision of the Act on Facilitation of Reconstruction of Condominiums of 2002. Under this situation, TMG announced their new policy direction of urban renewal in 2015, as shown in Figure 5-22; targeted areas (denoted by red areas) mostly concentrate within Tokyo's urban territory, and only nearby-station areas are targeted for Tokyo's suburban territory. Consequently, spatial and social segregation has appeared within Tokyo's suburban territory (Koizumi, 2010; Song and Deguchi, 2013).



Source: TMG ([www.toshiseibi.metro.tokyo.jp/seisaku/master\\_plan/150401\\_saikaihatuhousin\\_2.jpg](http://www.toshiseibi.metro.tokyo.jp/seisaku/master_plan/150401_saikaihatuhousin_2.jpg))

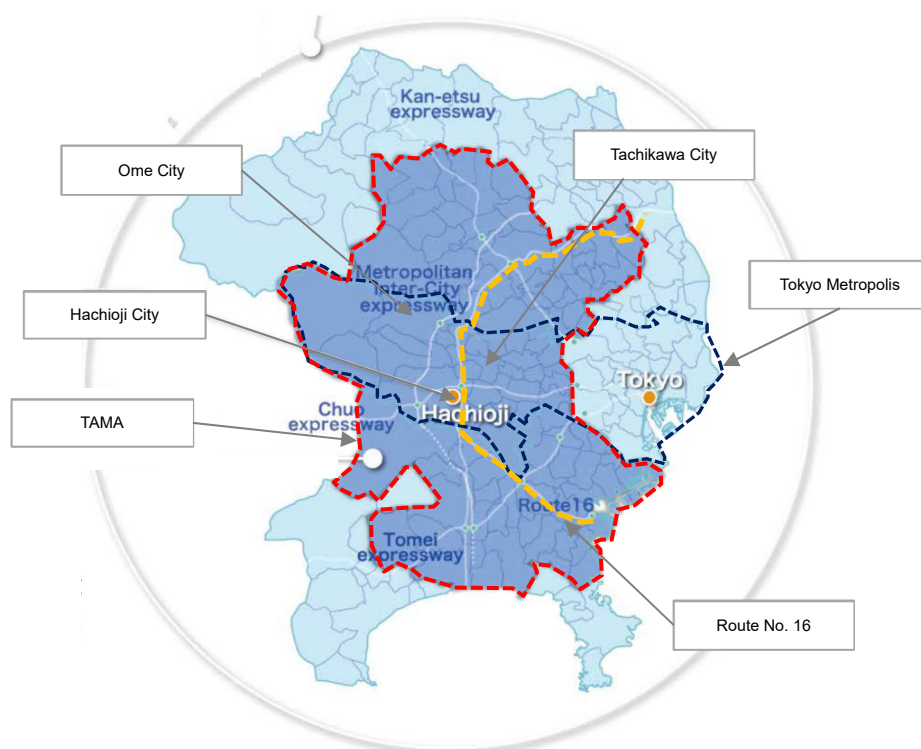
Figure 5-22 Recent TMG's Policy Direction for Urban Renewal

More recently, GOJ has attempted to promote further deregulations for economic revitalisation, announcing a slogan of 'Towards Creating the World's Most Business-Friendly Environment'. It enacted the Comprehensive Special Zones Law in 2011 and the National Strategic Special Zones Law in 2013. In this vein, following the Special Zones for Structural Reform (launched in 2002), various special economic zones have been designated, including the Special Zones for Asian Headquarters (launched in 2011), as one of the Comprehensive Special Zones for International Competitiveness, and National Strategic Economic Zones (launched in 2013). Simultaneously, relevant regulatory reforms have been made to attract foreign investments, such as the enactment of the Industrial Competitiveness Enhancement Act of 2013, Law on the Safety of Regenerative Medicine of 2013 and Pharmaceutical Affairs Law of 2014. As such, within Tokyo's urban territory, GOJ and TMG has closely worked for the strengthening of international competitiveness and economic revitalisation. However, Tokyo's suburban territory has seemingly been isolated from this recent movements in the 2010s, even though Hachioji City and Tachikawa City were designated as the Special Zones for Structural Reform in the early 2000s. This is evidenced by the fact that most of the recent special economic zones have been designated only within Tokyo's urban territory. The continued prioritisation on the metropolitan city centre has resulted in the urban-suburban divide in political and administrative, economic and socio-demographic terms.

As for Tokyo's suburban territory, GOJ, namely METI, has led industrial cluster projects for economic revitalisation. In 2001, GOJ started eighteen (18) industrial cluster projects across the nation, aiming to promote regional revitalisation and innovation through



government-industry-academia collaborations. For these projects, GOJ has set out three project phases, namely: 1) a start-up phase (during 2001 to 2005), 2) an expansion phase (during 2006 to 2010), and 3) an autonomous growth phase (during 2011 to 2020). Now, these projects have already entered the autonomous growth phase. According to Kodama (2002), prior to these projects, GOJ has established relevant legal frameworks. That is, it enacted the Law for Promoting University-Industry Technology Transfer of 1998, under which the Technology Licensing Organisations (TLOs) can be established to facilitate technical transfers from universities to industries. Then, it enacted the Law on Special Measures for Industrial Revitalisation of 1999 and Law for Enhancing Industrial Technological Capabilities of 2000 (Kodama, 2002). Among these industrial cluster projects, there is one significant project (named the 'Greater Tokyo Initiative') associated with Tokyo's suburban territory. As for a target area, the Technology Advanced Metropolitan Area, abbreviated as the TAMA (different from Tama Area), has been designated alongside the national road Route No. 16 in the form of stretching over three prefectures, namely Tokyo Metropolis, Kanagawa Prefecture and Saitama Prefecture, as shown in Figure 5-23.



Source: Adapted from the brochure of the TAMA Association  
([www.tamaweb.or.jp/wp3/wp-content/uploads/2012/12/GreaterTokyoInitiative\\_inEnglish.pdf](http://www.tamaweb.or.jp/wp3/wp-content/uploads/2012/12/GreaterTokyoInitiative_inEnglish.pdf))

Figure 5-23 TAMA as Designated Area for Industrial Cluster Project

This designation itself shows that Tokyo's suburban territory has great potential for economic and industrial development. In fact, Tokyo's suburban territory has accumulated local SMEs which have possessed greater competitiveness and higher productivities than average, especially those specialised in product development (Kodama, 2002, 2003, 2010a, 2010b). The TAMA

Association has served as an implementation body for this industrial cluster project. This association originally existed as an unincorporated association from 1998 before the inception of this project. Since 2001, this association has legally become a general incorporated association with corporate status, while being separated from GOJ. Besides, the association established the TAMA-TLO in 2000. Tokyo Metropolitan SME Support Centre has also participated in this project as an association member. Thus, the TAMA Association, including the TAMA-TLO, has made contributions to suburban economic revitalisation, for instance the creation of new government-industry-academia networks (Kodama, 2002, 2003, 2010a, 2010b; Okazaki, 2010; M. Sato, 2013). In these ways, GOJ has become eager to promote economic and industrial development with the exploitation of Tokyo's urban and suburban territories since the 2000s, aiming to escape from long-lasting economic stagnation.

#### **5.4 Positioning of Time Periods of '1975 to 1995' and '1995 to 2015' within Tokyo's Long-term Urbanisation Process**

This section clarifies the positioning of the targeted time periods within Tokyo's long-term urbanisation process. Table 5-1 summarises the aforementioned different phases of Tokyo's suburbanisation and post-suburbanisation. The period of '1975 to 1995', namely the pre-bubble period, is positioned in the stable growth period after rapid economic growth. The period of '1995 to 2015', namely the post-bubble period, is positioned in the stagnation and/or decline period under the back-to-the-city movement.

The main characteristics of Tokyo's suburban territory during '1975 to 1995' can be summarised as follows. Alongside the formation of self-contained suburban city-regions, Tokyo's suburban territory had experienced functional diversification through land use intensification, resulting in the diversification of suburban actors. It can be considered that Tokyo's suburban territory had made a shift from suburbanisation to post-suburbanisation during this period. From the viewpoint of the industrial mode, this period had been positioned in the early stage of post-fordist era. Yet, the suburban economy had still been dominated by manufacturing and commercial industries.

By contrast, Tokyo's suburban territory during '1995 to 2015' has entered the stagnation and/or decline phase after the collapse of the bubble economy in the early 1990s. Especially since the early 2000s, this situation has been exacerbated by the back-to-the-city movement of workplace and residence. Consequently, the multi-dimensional urban-suburban divide has been increasingly widened. From the viewpoint of the industrial mode, this period is positioned in the post-Fordist era. In fact, manufacturing production has steadily decreased after around the middle 1990s, alongside the decline of commercial consumption. In this situation, Tokyo's suburban territory has experienced new suburban restructuring under the deformation of the polycentric metropolitan structure.



Table 5- 1 Different Phases of Tokyo's Suburban Transformation:  
Positioning of '1975 to 1995' and '1995 to 2015'

Time period	Phase 1	Phase 2	Phase 3	Phase 4
	Early 1950s to middle 1960s	Middle 1960s to Middle 1970s	Middle 1970s to middle 1990s	Middle 1990s to Present
Overall characteristics	Rapid metropolitan growth and massive suburbanisation	Planned suburban development through strengthened public interventions	Formation of self-contained suburban city-regions	Global competitiveness agenda and the emergence of the back-to-the-city movement
Urbanisation mode	Suburbanisation		Post-suburbanisation	
	(Sub)urbanisation	Suburbanisation	Suburbanisation	Re-urbanisation
Urban-suburban dynamics	-	-	Convergence	Divergence
Metropolitan spatial structure	Monopolar spatial structure		Polycentric spatial structure	
Industrial mode	Fordism		Transition from Fordism to post-Fordism	Post-Fordism
	<ul style="list-style-type: none"> <li>- Industrialisation</li> <li>- Mass production</li> </ul>		<ul style="list-style-type: none"> <li>- Deindustrialisation and overseas transfer of production plants</li> <li>- Knowledge-intensive service and high-tech industries</li> </ul>	
Urban politics	Pure growth machine	Developmental state	Developmental state	Post-developmental state
Force/ impulse	-	-	Centrifugal	Centripetal
	<ul style="list-style-type: none"> <li>- Rural-to-urban migration</li> <li>- Increased housing demands</li> </ul>	<ul style="list-style-type: none"> <li>- Urban-to-suburban migration</li> <li>- Motorisation</li> <li>- Continued housing demands</li> </ul>	<ul style="list-style-type: none"> <li>- Urban-to-suburban migration</li> <li>- Rising land price within the metropolitan city centre</li> </ul>	<ul style="list-style-type: none"> <li>- Suburban-to-urban migration</li> </ul>
Image/ form/ land use	Extensification (uncontrolled)	Extensification (controlled)	Densification (infill development)	Densification (urban redevelopment)
	<ul style="list-style-type: none"> <li>- Integration of residential and agricultural activities</li> <li>- Uncontrolled private-sector development (urban sprawl)</li> </ul>	<ul style="list-style-type: none"> <li>- Planned residential and industrial development (top-down development)</li> <li>- Mixture of newcomer and traditional communities under increased middle-class families</li> </ul>	<ul style="list-style-type: none"> <li>- Relatively self-sustained suburban city-region</li> <li>- Functional diversification and mix-used development</li> <li>- Mass consumption</li> </ul>	<ul style="list-style-type: none"> <li>- Aging society</li> <li>- Mix-used redevelopment in nearby-station areas</li> <li>- Spatial polarisation and segregation</li> </ul>
Function	<ul style="list-style-type: none"> <li>- Commuting places to Tokyo's urban territory</li> </ul>	<ul style="list-style-type: none"> <li>- Commuting places to Tokyo's urban territory</li> <li>- Labour supply for production plants</li> </ul>	<ul style="list-style-type: none"> <li>- Increased high-order jobs (within the BCCs)</li> <li>- Strengthening of industrial linkages with local SMEs</li> </ul>	<ul style="list-style-type: none"> <li>- Decreased high-order jobs</li> <li>- Declining manufacturing and commercial industries</li> <li>- Growing social welfare industries</li> </ul>

Source: Author's own, developed from Phelps (2012) and Borsdorf (2004)

## **5.5 Chapter Conclusion: Necessity to Explore Time Periods of '1975 to 1995' and '1995 to 2015' from an Evolutionary Perspective**

Tokyo's suburban territory has a long history of accommodating human activities and experiencing political and administrative events even before the WWII, which have still influenced current suburban affairs. After the WWII, a series of urban policies has been formulated and implemented, or unimplemented, in the context of a development state to tackle ever-changing metropolitan issues and problems. In this process, Tokyo's suburban territory has changed its role and functions within the wider context. Broadly, Tokyo's long-term suburban transformation could be divided into the four differentiated phases. The time periods of '1975 to 1995' and '1995 to 2015', which are positioned in the latter two periods of the post-fordist era, have quite different characteristics. Metropolitan-wide polycentric formation has begun to be pursued during '1975 to 1995' by upper-level governmental entities, aiming to form self-contained suburban city-regions. However, the recent political and policy shift on the metropolitan city centre during '1995 to 2015' has triggered the strong back-to-the-city movement, which has increasingly magnified the urban-suburban divide in political and administrative, economic and socio-demographic terms. In this situation, considering slow changes in the political and administrative dimension and the rapid transition from suburbanisation to re-urbanisation, it is important to explore these sequential, but differentiated, two periods from an evolutionary perspective.

## Chapter 6

# Analysing Suburban Restructuring of Tokyo Metropolis through Quantitative Approach

### 6.1 Chapter Introduction

This chapter analyses Tokyo's suburban transformation from the perspective of both short- and long-term development paths through the quantitative approach, targeting all suburban municipalities. As explained in Chapter 4, PCA and CA are applied to the original dataset of multiple variables employed from the three P's analytical framework, namely: A) urban policies (political and administrative - fiscal) (Policy), B) economic restructuring (Production), and C) socio-demographic transformation (Population). Firstly, the quantitative approach identifies what kinds of growth and/or decline types of suburban municipalities (short-term development paths) have existed during the growth period of '1975 to 1995' and the shrinkage period of '1995 to 2015'. Then, it explores what kinds of different trajectories of suburban municipalities (long-term development paths) have been shaped within the contextual transition from growth to shrinkage. Finally, looking at their different trajectories, it justifies why Tachikawa City, Hachioji City and Ome City are chosen as case studies for a further investigation through the qualitative approach.

### 6.2 Relative Dynamics between Urban and Suburban Territories

This section reviews the relative dynamics between Tokyo's urban and suburban territories from a metropolitan perspective in a simplified manner, before moving to the multivariate analyses of all suburban municipalities. As discussed in Chapter 5, the multi-dimensional urban-suburban divide has been increasingly magnified in political and administrative, economic and socio-demographic terms. This review provides some numerical evidences for this divide. Simultaneously, it allows us to grasp the overall positioning of Tokyo's suburban territory within the metropolitan context during '1975 to 1995' and '1995 to 2015'. Table 6-1 shows the annual growth rates of representative variables employed from each of the three P's. During the growth period of '1975 to 1995', the suburban territory had experienced increases in population, employment and establishment and municipal tax revenue at a faster pace than the urban territory. During this period, the suburban territory had caught with the urban territory. In some sense, Tokyo's urban and suburban territories could be considered converging during '1975 to 1995'. However, during the shrinkage period of '1995 to 2015', the suburban territory has experienced their increases at a slower pace than the urban territory. Therefore, in some sense,

Tokyo's urban and suburban territories could be considered diverging during '1995 to 2015'. In recent years, namely since the 2010s, the extent of divergence has become stronger, resulting in the increasingly magnified multi-dimensional urban-suburban divide. In short, the relative dynamics between urban and suburban territories have turned inside out within the contextual transition from growth to shrinkage from the perspective of the three P's.

Table 6-1 Relative Dynamics between Urban and Suburban Territories  
during '1975 to 1995' and '1995 to 2015'

Representative Variable			Urbanisation Phase	
			Growth Period (1975 to 1995)	Shrinkage Period (1995 to 2015)
Three P's Analytical Framework	Socio-demographic Transformation (Population)	Overall Performance	Suburban	Urban
		Population (Flow)	Urban (-) < <b>Suburban (+)</b> (-0.4% < 1.2%)	<b>Urban (++)</b> > Suburban (+) (0.8% > 0.6%)
		Young Population (Flow)	Urban (-) < <b>Suburban (-)</b> (-3.1% < -1.8%)	<b>Urban (+)</b> > Suburban (-) (0.2% > -0.2%)
		Productive-age Population (Flow)	Urban (-) < <b>Suburban (+)</b> (-0.3% < 1.5%)	<b>Urban (+)</b> > Suburban (-) (0.2% > -0.3%)
		Elderly Population (Flow)	Urban (+) < <b>Suburban (++)</b> (3.3% < 5.3%)	Urban (+) < <b>Suburban (++)</b> (3.1% < 4.3%)
		Average Income (Flow)	<b>Urban (++)</b> > Suburban (+) (5.2% > 4.9%)	<b>Urban (-)</b> > Suburban (-) (0.2% > -0.9%)
		Population Density (Stock) (as of 1985 and 2005)	Urban: 255.6 pers/ ha Suburban: 170.1 pers/ ha	Urban: 269.1 pers/ ha Suburban: 169.3 pers/ ha
	Economic Restructuring (Production)	Overall Performance	Suburban	Urban / Suburban
		Manufacturing Production (Flow)	Urban (+) < <b>Suburban (++)</b> (1.4% < 6.1%)	Urban (-) < <b>Suburban (-)</b> (-6.5% < -2.6%)
		Commercial Production (Flow)	Urban (+) < <b>Suburban (++)</b> (5.5% < 7.9%)	<b>Urban (-)</b> > Suburban (-) (-0.7% > -1.3%)
		Agricultural Production (Flow)	<b>Urban (-)</b> > Suburban (-) (-1.2% > -1.3%)	Urban (-) < <b>Suburban (-)</b> (-4.2% < -0.8%)
		Employment (Flow)	Urban (+) < <b>Suburban (++)</b> (1.1% < 2.9%)	<b>Urban (++)</b> > Suburban (+) (0.4% > 0.3%)
		Establishment (Flow)	Urban (+) < <b>Suburban (++)</b> (0.4% < 1.7%)	Urban (-) < <b>Suburban (-)</b> (-1.0% < -0.3%)
		Land Price (Flow)	<b>Urban (++)</b> > Suburban (+) (8.3% > 7.1%)	<b>Urban (-)</b> > Suburban (-) (-1.2% > -2.2%)
		Employment Density (Stock) (as of 1985 and 2005)	Urban: 217.0 pers/ha Suburban: 58.1 pers/ha	Urban: 228.7 pers/ha Suburban: 61.6 pers/ha
	Urban Policies (Political and Administrative - Fiscal) (Policies)	Overall Performance	Suburban	Urban
		Municipal Tax Revenue (Flow)	Urban (+) < <b>Suburban (++)</b> (6.3% < 8.5%)	<b>Urban (++)</b> > Suburban (+) (1.0% > 0.5%)
		National Grants-in-aid (Flow)	<b>Urban (++)</b> > Suburban (+) (4.8% > 3.9%)	<b>Urban (++)</b> > Suburban (+) (5.1% > 4.9%)
		Local Allocation Tax (Flow)	-	-
		Metropolitan Grants-in-aid (Flow)	Urban (+) < <b>Suburban (++)</b> (6.4% < 8.9%)	<b>Urban (++)</b> > Suburban (+) (3.4% > 1.7%)
		Municipal Expenditure (Flow)	<b>Urban (++)</b> > Suburban (+) (7.3% > 7.0%)	<b>Urban (++)</b> > Suburban (+) (1.3% > 1.0%)
		Social Welfare Expenditure (Flow)	Urban (+) < <b>Suburban (++)</b> (8.3% < 8.5%)	Urban (+) < <b>Suburban (++)</b> (3.3% < 4.2%)
		Commercial and Industrial Expenditure (Flow)	<b>Urban (++)</b> > Suburban (+) (10.0% > 8.5%)	Urban (-) < <b>Suburban (+)</b> (-2.2% < 0.1%)
		Public Work Expenditure (Flow)	Urban (+) < <b>Suburban (++)</b> (8.0% < 8.6%)	<b>Urban (-)</b> > Suburban (-) (-1.4% > -2.9%)

Source: Author's own

### **6.3 Multivariate Analyses of Suburban Municipalities by PCA and CA**

The original dataset is a matrix consisting of 30 suburban municipalities and 44 variables employed from the three P's analytical framework. This matrix is prepared for each of the growth and shrinkage periods. As summary statistics, the average values of these variables are presented in Appendix B-1. PCA and CA are applied to the original dataset of the growth period and that of the shrinkage period, as detailed in Chapter 4. It should be remembered that the eigenvalue of each PC indicates the extent of its variability for the prediction of the original dataset. PC Loadings represent how original variables are loaded on PCs. PC Scores for each suburban municipality, which are transformed values showing its positioning on the new coordinate system of PCs. Then, CA is applied to the new coordinates of PC Scores.

This research places more emphasis on the shrinkage period of '1995 to 2015' rather than the growth period of '1975 to 1995'. Therefore, in this chapter, the analysis results of '1995 to 2015' are firstly presented, and those of '1975 to 1995' are subsequently presented in a retrospective manner. The period of '1975 to 1995' is positioned in the context of stable growth, and the period of '1995 to 2015' is positioned in the context of stagnation and/or decline. Yet, clusters to be identified in this chapter are simply described as 'Clusters 1 to 5 [Growth]' for the growth period of '1975 to 1995' and 'Clusters 1 to 5 [Shrinkage]' for the shrinkage period of '1995 to 2015'. That is, square brackets indicate the context of the time period for these clusters. Thus, the contextual shift between these two time periods is described by using the term 'within the contextual transition from growth to shrinkage'. When interpreting analysis results, it should be remembered that this research puts a stronger focus on flows rather than stocks.

#### **6.3.1 Identification of Growth and/or Decline Types for Shrinkage Period of '1995 to 2015' from the Perspective of Short-term Development Paths**

This section explores what kinds of growth and/or decline types of suburban municipalities have been shaped during the shrinkage period of '1995 to 2015'. At the first analysis stage, PCA is applied to the original dataset for data reduction. As one of analysis results, PC1 and PC2 Scores, which are plotted on PC1 and PC2 axes, are illustrated in Figure 6-1. In this figure, inner suburban municipalities are denoted by circles, outer suburban municipalities by quadrangles, and peri-suburban municipalities by triangles. At the second analysis stage, CA identifies five clusters, which are referred to as Clusters 1 to 5 [Shrinkage]. In Figure 6-1, these different Clusters 1 to 5 [Shrinkage] are denoted by different colours. PC1 and PC2 Loadings are illustrated in Figure 6-2, which shows how the original variables are loaded on PC1 and PC2. Therefore, for interpretation, Figure 6-2 should be kept in mind in the form of being superimposed on Figure 6-1. The correlations among original variables for the shrinkage period of '1995 to 2015' are shown in Appendix B-2. The eigenvalues, contribution ratios and

cumulative contribution ratios of PCs are shown in Table 6-2. The contribution ratios of PC1 and PC2 are respectively 37.5 percent and 16.3 percent. Therefore, the total contribution ratio of PC1 and PC2 is 53.9 percent; this means that PC1 and PC2 account for 53.9 percent of the original dataset.

Table 6-2 Eigenvalues, Contribution Ratios and Cumulative Contribution Ratios of PCs for Shrinkage Period of '1995 to 2015'

PC No.	Eigenvalue	Contribution Ratio (%)	Cumulative Contribution Ratio (%)
PC 1	16.52	37.5	37.5
PC 2	7.18	16.3	53.9
PC 3	3.69	8.4	62.2
PC 4	3.29	7.5	69.7
PC 5	2.39	5.4	75.1
PC 6	1.65	3.8	78.9
PC 7	1.47	3.3	82.2
PC 8	1.42	3.2	85.5
PC 9	1.08	2.4	87.9
PC 10	0.95	2.2	90.1

Source: Author's own

CA is applied to the new coordinates of PCs, namely PC Scores of suburban municipalities. Here, it is necessary to make a decision about how many PCs should be retained. Here, we retain PCs with the eigenvalues of 1.0 and over, referring to Kaiser's rule (Jolliffe, 2002)<sup>1</sup>. Therefore, we take 1 to 9 PCs; in this case, the cumulative contribution ratio is 87.9 percent. Then, CA is applied to the new coordinates of PCs 1 to 9, namely PC 1 to 9 Scores, using K-means++ Clustering. The main characteristics of Clusters 1 to 5 [Shrinkage] are explained below.

<sup>1</sup> According to Nagata and Munechika (2001), the following two criteria are suggested: 1) to retain PCs with the eigenvalues of 1.0 and over, and 2) to retain PCs to achieve an accumulative contribution ratio of 80 percent and over.

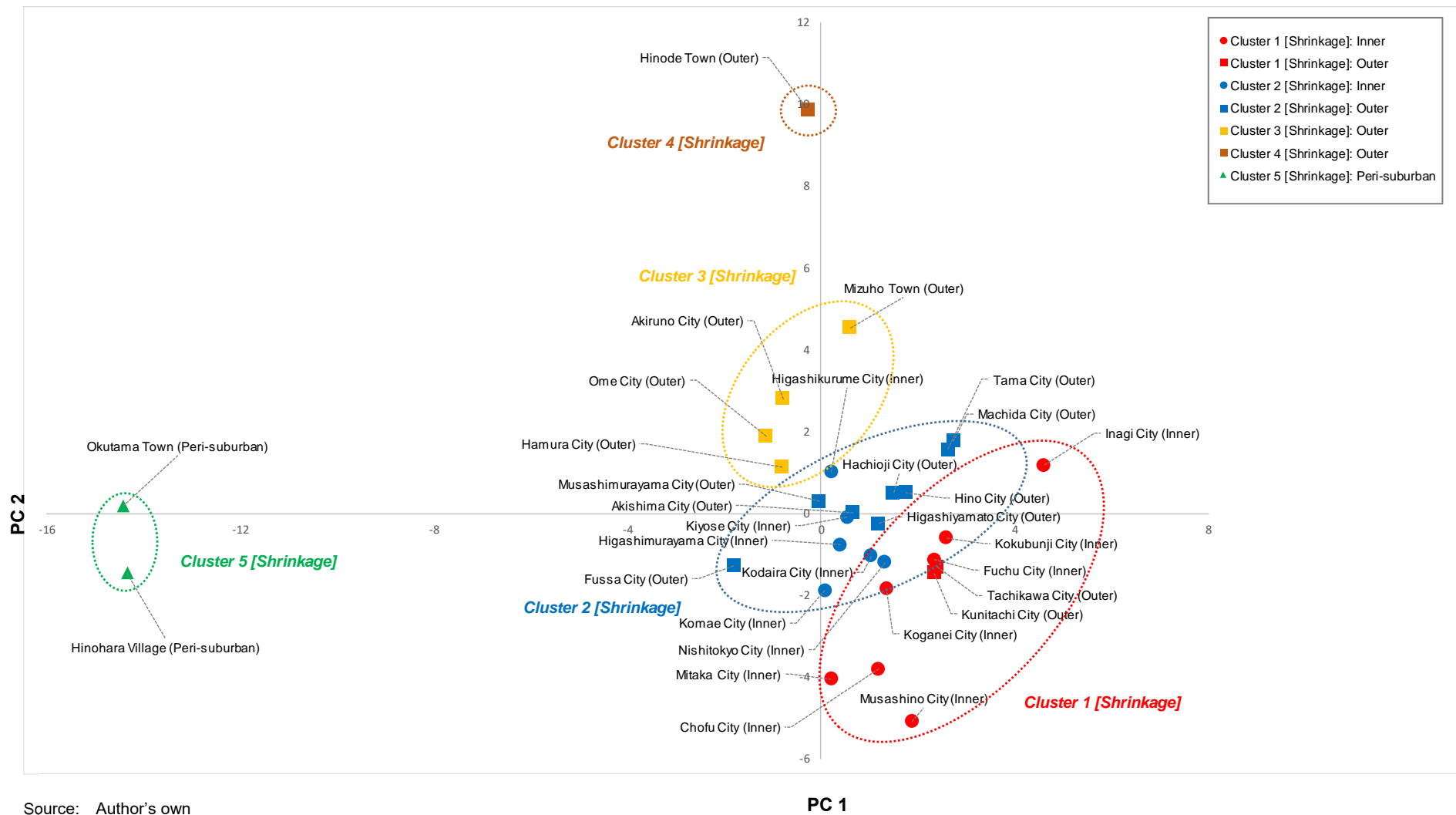
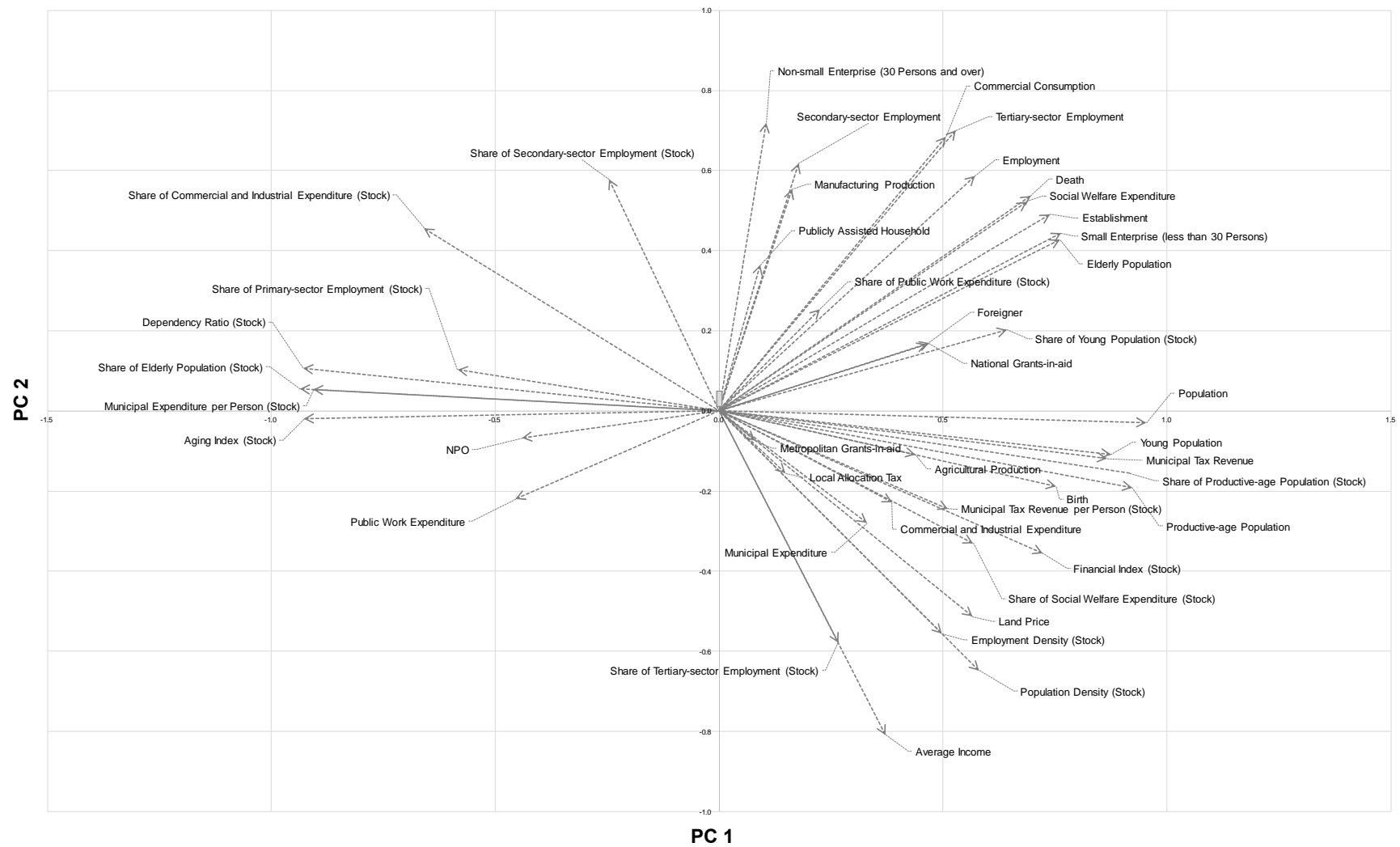


Figure 6-1 Plotted PC1 and PC2 Scores of Suburban Municipalities for Shrinkage Period of '1995 to 2015'



Source: Author's own

Figure 6-2 PC1 and PC2 Loadings of Original Variables for Shrinkage Period of '1995 to 2015'



Through CA, growth and/or decline types of suburban municipalities for the shrinkage period of '1995 to 2015' are classified into five clusters, which are referred to as Clusters 1 to 5 [Shrinkage]. To be noted, this research reduces the number of clusters to a possible extent to understand Tokyo's suburban transformation in a simplified manner. For Clusters 1 to 5 [Shrinkage], the standardised average values of representative variables from the three P's are calculated to capture the main characteristics of each cluster, as illustrated in Figure 6-3. The standardised average values of all variables for the shrinkage period of '1995 to 2015' are presented in Appendix B-3, and box-and-whisker plots for Clusters 1 to 3 [Shrinkage] are shown in Appendix B-4. Notably, in Figure 6-3, population density, employment density and the fiscal index are stock variables that show the conditions as of 2005, and the other variables are flow variables that show changes (annual growth rates) during '1995 to 2015'. Here, suburban municipalities with higher fiscal indexes have better fiscal conditions. The spatial distribution of Clusters 1 to 5 [Shrinkage] is illustrated in Figure 6-4. The main characteristics of each cluster are described below in a step-wise manner; these characteristics are summarised in Table 6-3. Here, more attention should be paid to Clusters 1 to 3 [Shrinkage].

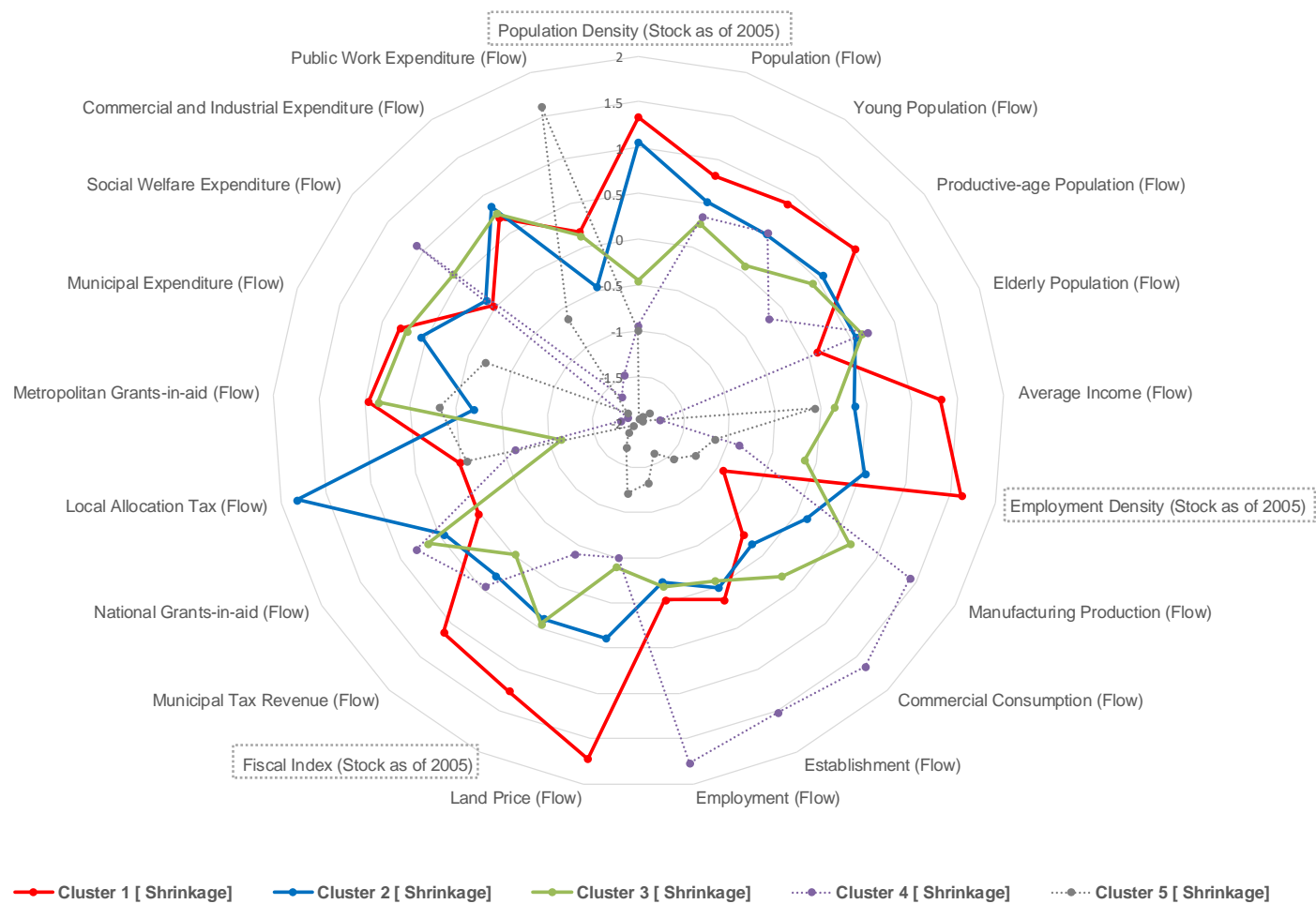
Cluster 1 [Shrinkage] would be briefly described as 'more youthful, revitalising suburban municipalities'. From the viewpoint of flow, the main characteristics of this cluster type are as follows: population increase (especially, greater increase of young and productive-age population) and lesser decrease of average income in socio-demographic terms; greater decline of manufacturing production, decline of commercial consumption, stagnation of employment and establishment, and lesser decline of land price in economic terms, and; greater increase of municipal tax revenue and metropolitan grants-in-aid from TMG in political and administrative terms. Simply, the overall performance of this cluster type can be described as 'growth': here, growth in socio-demographic terms, stagnation in economic terms, and growth in political and administrative terms. As shown in Figure 6-4, this cluster type can be observed mainly for inner suburban municipalities alongside the JR Chuo Line and adjacent outer suburban municipalities. Tachikawa City is classified into this cluster type. Under the back-to-the city movement, these suburban municipalities can be considered to enjoy the in-migration of young and productive-age population with relatively higher income levels, partly contributing to the prevention of rapid decrease of land price and expansion of fiscal capacities of municipal governments. This in-migration has led to the increase in the number of births. However, manufacturing production has greatly decreased in both absolute and relative terms, mainly due to deindustrialisation. Their overall economies would be considered stagnating, whilst some municipalities such as Tachikawa City are successful in increasing employment and establishment. Therefore, it seems that on the revenue side, municipal governments of this cluster type have been mainly sustained by the increase of young and productive-age population with relatively higher income levels and lesser decrease of land price. On average, compared with Cluster 2 [Shrinkage], this cluster type has increased metropolitan grants-in-aid from TMG, whilst a more detailed investigation is necessary. Compared with Cluster 2

[Shrinkage], this cluster type does not show remarkable characteristics in terms of the inter-sectoral relationship among different policy domains on the expenditure side.

Cluster 2 [Shrinkage] would be briefly described as 'stagnating suburban municipalities with growing social welfare industries, but with gradually worsened fiscal conditions'. From the viewpoint of flow, the main characteristics of this cluster type are as follows: population stagnation (especially, relatively moderate decrease of young and productive-age population, but relatively moderate increase of elderly population) in socio-demographic terms; relatively moderate decline of manufacturing and commercial production, stagnation of employment and establishment, and relatively moderate decrease of land price in economic terms; and stagnation of municipal tax revenue and greater decrease of public work expenditure.<sup>2</sup> Simply, the overall performance of this cluster type can be described as 'stagnation': here, stagnation in socio-demographic terms, stagnation in economic terms, and stagnation in political and administrative terms. As shown in Figure 6-4, this cluster type can be observed mainly for suburban municipalities located in the southern part of Tokyo's outer suburban territory and northern part of the inner suburban territory. Hachioji City is classified into this cluster type. Inner suburban municipalities of this cluster type are located alongside the Seibu Shinjuku Line, which has relatively less accessibility than the JR Chuo Line. Notably, the northern part of the inner suburban territory has already begun to stagnate even under the back-to-the-city movement. Most suburban municipalities of this cluster type seem to be on the way of shifting from growth to shrinkage. They have faced increasingly widened gaps between their revenue capacities and increased demands of public services, especially for elderly and medical care. Whilst a more detailed investigation is necessary, they seem to optimise their municipal expenditures by reducing public work expenditures against rapidly increased social welfare expenditures from an inter-sectoral perspective. Simultaneously, it is assumed that some suburban municipalities have come to be dependent on GOJ through local allocation tax as financial supports for flexible use, due to their increasingly worsened fiscal conditions. Yet, this requires a closer investigation since the annual growth rates of local allocation tax have widely varied for suburban municipalities of this cluster type.

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<sup>2</sup> Suburban municipalities of Cluster 1 [Shrinkage] have tended to increase educational expenditures.



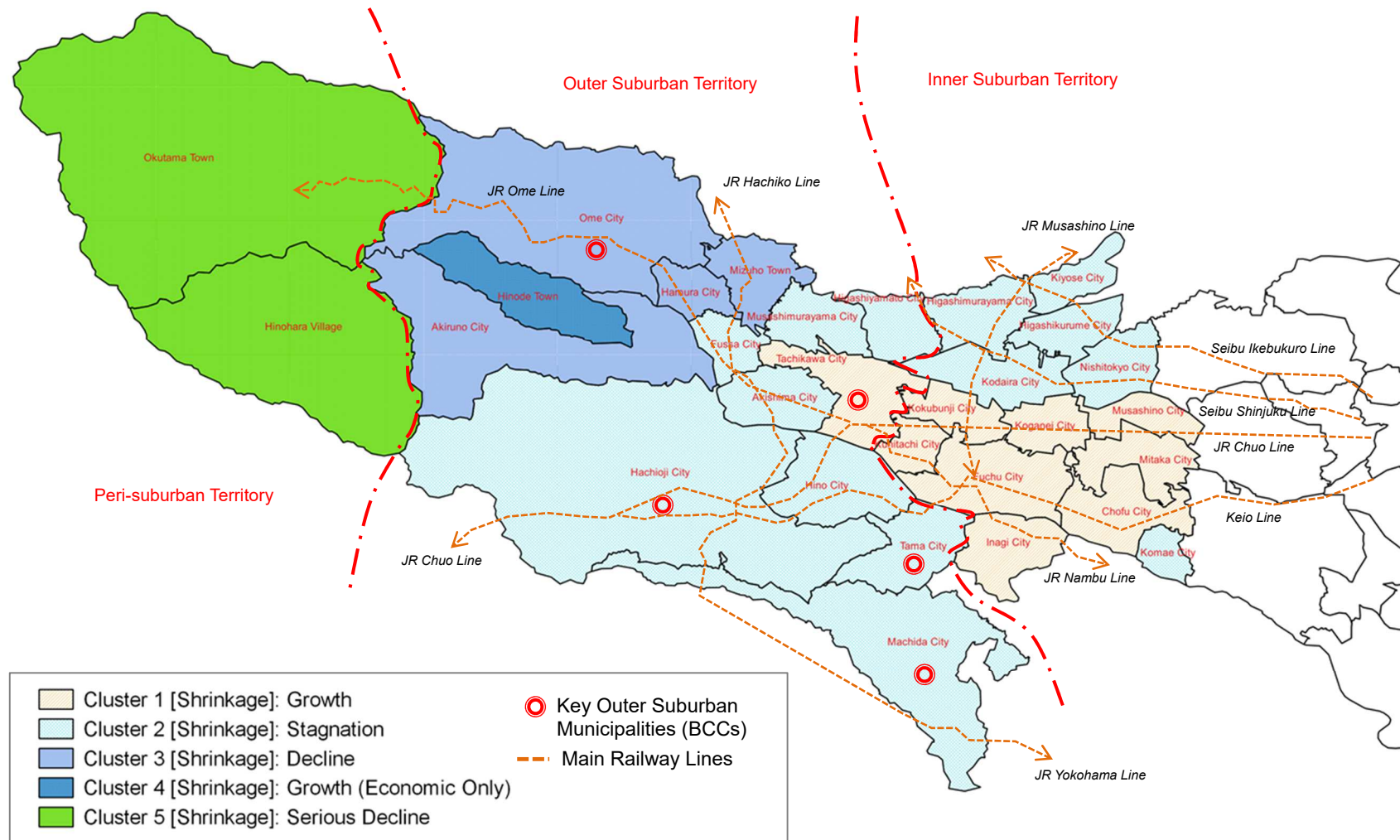
Source: Author's own

Figure 6-3 Standardised Average Values of Representative Variables for Clusters 1 to 5 [Shrinkage] during '1995 to 2015'

Table 6-3 Main Characteristics of Growth and/or Decline Types for Shrinkage Period of '1995 to 2015'

Cluster Name		Cluster 1 [Shrinkage]	Cluster 2 [Shrinkage]	Cluster 3 [Shrinkage]	Cluster 4 [Shrinkage]	Cluster 5 [Shrinkage]
Overall Performance		Growth	Stagnation	Decline	Growth (Economic Only)	Serious Decline
Classified Suburban Municipalities	Inner	<ul style="list-style-type: none"> <li>● Musashino City</li> <li>● Mitaka City</li> <li>● Chofu City</li> <li>● Koganei City</li> <li>● Inagi City</li> <li>● Fuchu City</li> <li>● Kokubunji City</li> </ul>	<ul style="list-style-type: none"> <li>● Komae City</li> <li>● Nishitokyo City</li> <li>● Higashikurume City</li> <li>● Kiyose City</li> <li>● Kodaira City</li> <li>● Higashimurayama City</li> </ul>	-	-	-
	Outer	<ul style="list-style-type: none"> <li>● Kunitachi City</li> <li>● Tachikawa City</li> </ul>	<ul style="list-style-type: none"> <li>● Tama City</li> <li>● Higashiyamato City</li> <li>● Machida City</li> <li>● Hino City</li> <li>● Musashimurayama City</li> <li>● Akishima City</li> <li>● Fussa City</li> <li>● Hachioji City</li> </ul>	<ul style="list-style-type: none"> <li>● Mizuho Town</li> <li>● Hamura City</li> <li>● Akiruno City</li> <li>● Ome City</li> </ul>	● Hinode Town	<ul style="list-style-type: none"> <li>● Hinohara Village</li> <li>● Okutama Town</li> </ul>
Three P's Analytical Framework		<u>Growth</u> <ul style="list-style-type: none"> <li>- Greater population increase (especially, greater increase of young and productive-age population)</li> <li>- Lesser decrease of average income</li> </ul>	<u>Stagnation</u> <ul style="list-style-type: none"> <li>- Population stagnation (stagnation or decline of young and productive-age population under relatively moderate increase of elderly population)</li> </ul>	<u>Decline</u> <ul style="list-style-type: none"> <li>- Population stagnation or greater population decrease (greater decrease of young and productive-age population under greater increase of elderly population)</li> </ul>	<u>Decline</u> <ul style="list-style-type: none"> <li>- Greater population decrease (greater decrease of young and productive-age population under greater increase of elderly population)</li> </ul>	<u>Serious Decline</u> <ul style="list-style-type: none"> <li>- Serious population decline of all the generations</li> </ul>
		<u>Stagnation</u> <ul style="list-style-type: none"> <li>- Greater decline of manufacturing production</li> <li>- Decline of commercial consumption</li> <li>- Stagnation of employment and establishment (with some exceptions such as Tachikawa City)</li> <li>- Lesser decline of land price</li> </ul>	<u>Stagnation</u> <ul style="list-style-type: none"> <li>- Decline of manufacturing production</li> <li>- Decline of commercial consumption</li> <li>- Stagnation of employment and establishment</li> <li>- Relatively moderate decrease of land price</li> </ul>	<u>Decline</u> <ul style="list-style-type: none"> <li>- Decline of manufacturing production</li> <li>- Decline of commercial consumption</li> <li>- Stagnation of employment and establishment</li> <li>- Greater decline of land price</li> </ul>	<u>Growth</u> <ul style="list-style-type: none"> <li>- Growth of manufacturing production</li> <li>- Growth of commercial consumption</li> <li>- Greater increase of employment and establishment</li> <li>- Greater decrease of land price</li> </ul>	<u>Serious Decline</u> <ul style="list-style-type: none"> <li>- Serious decline of manufacturing production</li> <li>- Serious decline of commercial consumption</li> <li>- Serious decrease of establishment and employment</li> <li>- Greater decrease of land price</li> </ul>
		<u>Growth</u> <ul style="list-style-type: none"> <li>- Greater increase of municipal tax revenue</li> <li>- Greater increase of metropolitan grants-in-aid from TMG</li> </ul>	<u>Stagnation</u> <ul style="list-style-type: none"> <li>- Stagnation of municipal tax revenue</li> <li>- Greater decrease of public work expenditure</li> <li>- Greater increase of local allocation tax from GOJ for some suburban municipalities</li> <li>- Lesser increase of metropolitan grants-in-aid from TMG</li> </ul>	<u>Decline</u> <ul style="list-style-type: none"> <li>- Stagnation or greater decrease of municipal tax revenue</li> <li>- Greater increase of social welfare expenditure</li> <li>- Greater increase of metropolitan grants-in-aid from TMG</li> </ul>	<u>Decline</u> <ul style="list-style-type: none"> <li>- Stagnation of municipal tax revenue</li> <li>- Greater increase of social welfare expenditure</li> </ul>	<u>Serious Decline</u> <ul style="list-style-type: none"> <li>- Serious decline of municipal tax revenue</li> <li>- Greater increase of public work expenditure</li> </ul>

Source: Author's own



Source: Author's own

Figure 6-4 Spatial Distribution of Clusters 1 to 5 [Shrinkage] for Shrinkage Period of '1995 to 2015'

Cluster 3 [Shrinkage] would be briefly described as 'older, declining suburban municipalities'. From the viewpoint of flow, the main characteristics of this cluster type are as follows: population decline and/or stagnation (especially, greater decrease of young and productive-age population under greater increase of elderly population) in socio-demographic terms; decline of manufacturing and commercial production and greater decline of land price in economic terms; and decrease and/or stagnation of municipal tax revenue, greater increase of social welfare expenditure, and greater increase of metropolitan grants-in-aid from TMG. Simply, the overall performance of this cluster type can be described as 'decline': here, decline in socio-demographic terms, decline in economic terms, and decline in political and administrative terms. As shown in Figure 6-4, this cluster type can be observed mainly for suburban municipalities located in the northern part of Tokyo's outer suburban territory alongside the JR Ome Line connected to the JR Chuo Line at JR Tachikawa Station. Ome City is classified into this cluster type. Compared with Cluster 2 [Shrinkage], most suburban municipalities of this cluster type seem to already enter the phase of decline. It might be considered that TMG has begun to increase financial supports, whilst a closer investigation is necessary. Whilst the growth of local allocation tax is smaller when compared to Cluster 1 [Shrinkage] and Cluster 2 [Shrinkage], most suburban municipalities of this cluster type have continued to be dependent on GOJ through local allocation tax even since the period of suburban growth.

Cluster 4 [Shrinkage] would be briefly described as 'older, but economically benefitted suburban municipality'. From the viewpoint of flow, the main characteristics of this cluster type are as follows: population stagnation (especially, relatively moderate decrease of young and productive-age population, but greater increase of elderly population) in socio-demographic terms; growth of manufacturing and commercial production, growth of employment and establishment, but greater decrease of land price in economic terms; and stagnation of municipal tax revenue, greater increase of social welfare expenditure, and greater increase of national grants-in-aid as financial supports for non-flexible use from GOJ. Simply, the overall performance of this cluster type can be described as 'growth (economic only)': here, decline in socio-demographic terms, growth in economic terms, and decline in political and administrative terms. This cluster type is an exception case, into which only Hinode Town is classified (see Figure 6-4). Hinode Town is a small city, which has been greatly affected by the inducement of a few large-scale manufacturing plants and/or commercial malls. In fact, a big commercial mall recently opened in this city.

Cluster 5 [Shrinkage] would be briefly described as ‘continuously declining peri-suburban municipalities’. From the viewpoint of flow, the main characteristics are serious declines in terms of almost all aspects. Simply, the overall performance of this cluster type can be described as ‘serious decline’: here, serious decline in socio-demographic terms, serious decline in economic terms, and serious decline in political and administrative terms. Only peri-suburban municipalities are classified into this cluster type, namely Okutama Town and Hinohara Village that have continued to decline even during the growth period of ‘1975 to 1995’ (see Figure 6-4).

In broad terms, looking at relationships between stock and flow variables for Clusters 1 to 3 [Shrinkage], affluent suburban municipalities have tended to grow at a faster pace than lagging suburban municipalities. This is almost opposite to the situation during the growth period of ‘1975 to 1995’, as presented later. Therefore, it could be considered that gaps between affluent and lagging suburban municipalities have been increasingly widened over recent decades.

### **6.3.2 Identification of Growth and/or Decline Types for Growth Period of ‘1975 to 1995’ from the Perspective of Short-term Development Paths**

The same analysis procedure as the shrinkage period of ‘1995 to 2015’ is applied to the growth period of ‘1975 to 1995’. At the first analysis stage, PCA is applied to the original dataset for data reduction. As one of analysis results, PC1 and PC2 Scores, which are plotted on PC1 and PC2 axes, are illustrated in Figure 6-5. In this figure, inner suburban municipalities are denoted by circles, outer suburban municipalities by quadrangles, and peri-suburban municipalities by triangles. At the second analysis stage, CA identifies five clusters, which are referred to as Clusters 1 to 5 [Growth]. In Figure 6-5, these different Clusters 1 to 5 [Growth] are denoted by different colours. PC1 and PC2 Loadings are illustrated in Figure 6-6, which shows how the original variables are loaded on PC1 and PC2. Therefore, for interpretation, Figure 6-6 should be kept in mind in the form of being superimposed on Figure 6-5. The correlations among original variables for the growth period of ‘1975 to 1995’ are shown in Appendix B-2. The eigenvalues, contribution ratios and cumulative contribution ratios of PCs are shown in Table 6-4. The contribution ratios of PC1 and PC2 are respectively 34.3 percent and 23.3 percent. Therefore, the total contribution ratio of PC1 and PC2 is 57.7 percent; this means that PC1 and PC2 account for 57.7 percent of the original dataset.

Table 6-4 Eigenvalues, Contribution Ratios and Cumulative Contribution Ratios of PCs  
for Growth Period of '1975 to 1995'

PC No.	Eigenvalue	Contribution Ratio (%)	Cumulative Contribution Ratio (%)
PC 1	14.77	34.3	34.3
PC 2	10.04	23.3	57.7
PC 3	3.07	7.1	64.8
PC 4	2.77	6.4	71.3
PC 5	2.05	4.8	76.0
PC 6	1.99	4.6	80.6
PC 7	1.45	3.4	84.0
PC 8	1.25	2.9	86.9
PC 9	0.99	2.3	89.2
PC 10	0.76	1.8	91.0

Source: Author's own

CA is applied to the new coordinates of PCs, namely PC Scores of suburban municipalities. In the same way as the shrinkage period of '1995 to 2015', we retain PCs with the eigenvalues of 1.0 and over, referring to Kaiser's rule (Jolliffe, 2002). Therefore, we take 1 to 8 PCs; in this case, the cumulative contribution ratio is 86.9 percent. Then, CA is applied to the new coordinates 1 to 8, namely PC 1 to 8 Scores, using K-means++ Clustering. The main characteristics of Clusters 1 to 5 [Growth] are explained below.



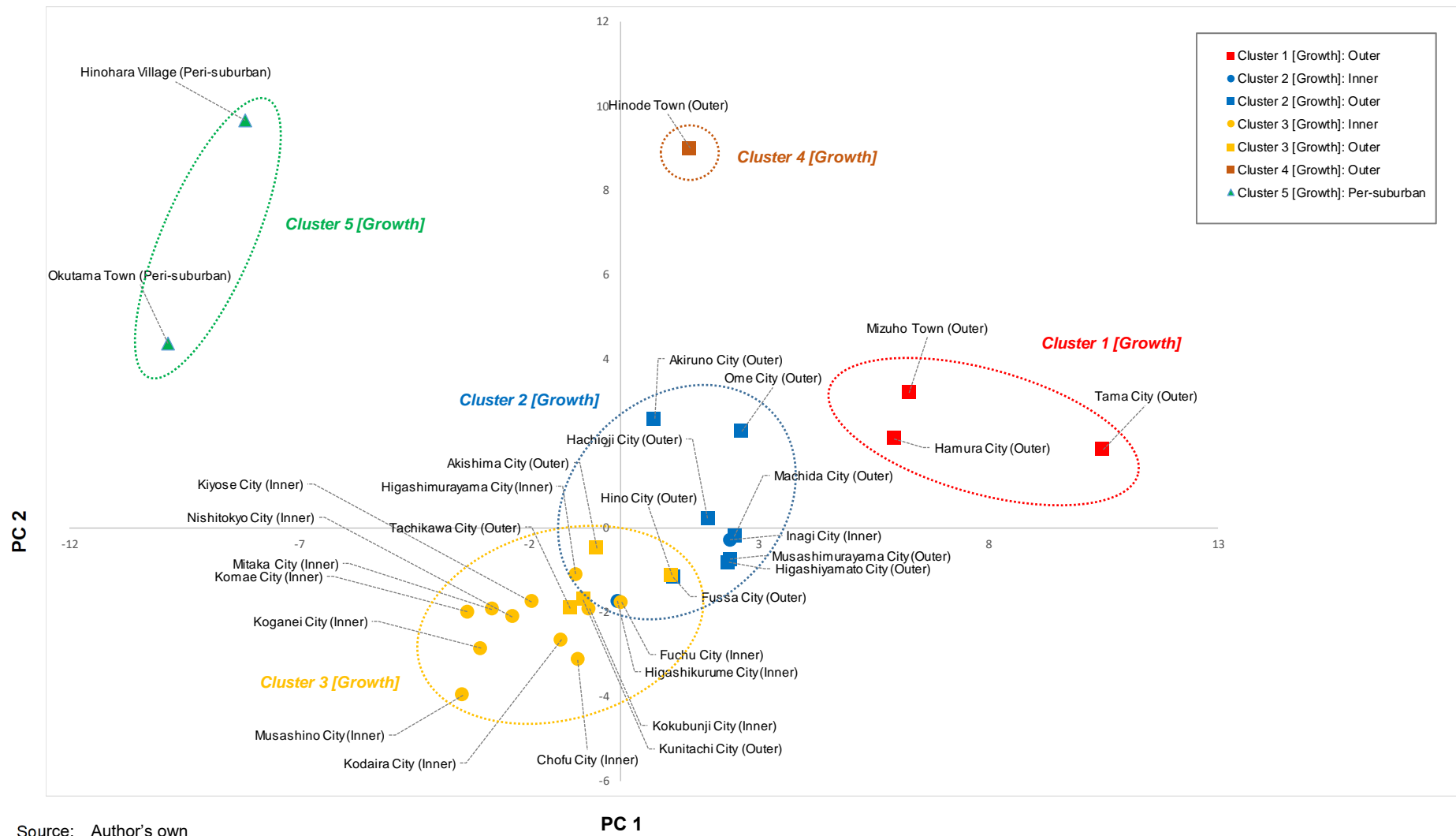
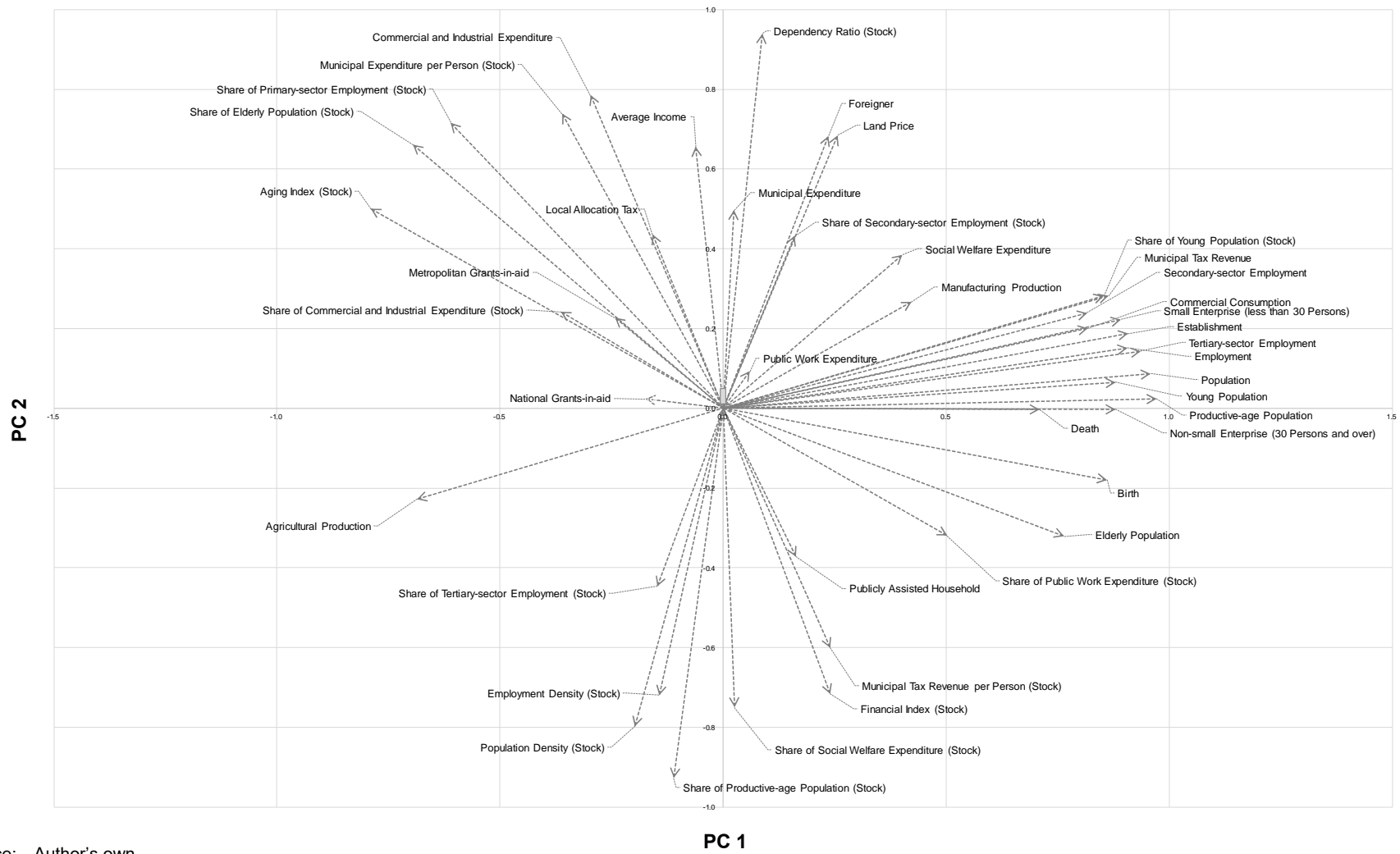


Figure 6-5 Plotted PC1 and PC2 Scores of Suburban Municipalities for Growth Period of '1975 to 1995'



Source: Author's own

Figure 6-6 PC1 and PC2 Loadings of Original Variables for Growth Period of '1975 to 1995'

Through CA, growth and/or decline types of suburban municipalities for the growth period of '1975 to 1995' are classified into five clusters, which are referred to as Clusters 1 to 5 [Growth]. For Cluster 1 to 5 [Growth], the standardised average values of representative variables from the three P's are calculated to capture the main characteristics of each cluster, as illustrated in Figure 6-7. The standardised average values of all variables for the growth period of '1975 to 1995' are presented in Appendix B-3, and box-and-whisker plots for Clusters 1 to 3 [Growth] are presented in Appendix B-4. Notably, in Figure 6-7, population density, employment density and the fiscal index are stock variables that show the conditions as of 1985, and the other variables are flow variables that show changes (annual growth rates) during the growth period of '1975 to 1995'. The spatial distribution of Cluster 1 to 5 [Growth] is illustrated in Figure 6-8. The main characteristics of each cluster are described below in a step-wise manner; these characteristics are summarised in Table 6-5. Here, more attention should be paid to Clusters 1 to 3 [Growth] in the same way as the shrinkage period of '1995 to 2015'.

The noteworthy thing is that Clusters 1 to 3 [Growth] are similar in terms of the mode of suburban growth. That is, from the viewpoint of flow, the main characteristics of Clusters 1 to 3 [Growth] are as follows: increase of productive-age and elderly population in socio-demographic terms; increase of manufacturing production, commercial consumption, employment and establishment, and increase of land price in economic terms; and increase of municipal tax revenue and expenditure for all the policy domains in political and administrative terms.<sup>3</sup> It can be considered that remarkable differences among Clusters 1 to 3 [Growth] are the paces and magnitude of growth. Therefore, simply, the overall performance of Cluster 1 [Growth], Cluster 2 [Growth] and Cluster 3 [Growth] can be respectively described as 'higher growth', 'moderate growth' and 'lower growth'. From the perspective of the three P's, all the socio-demographic, economic and political and administrative factors had grown in a synchronised manner, even though their paces and magnitude had been differentiated. This synchronisation is the key to understanding Tokyo's suburban transformation during the growth period of '1975 to 1995'. Importantly, it can be said that the mode of suburban transformation is less complex during the growth period of '1975 to 2015', compared with the shrinkage period of '1995 to 2015'. Here, notably, the paces of economic growth differ among Clusters 1 to 3 [Growth], differently from Clusters 1 to 3 [Shrinkage] that have all faced economic stagnation with fewer differences. Moreover, among Clusters 1 to 3 [Growth], there are fewer differences in the changes of average income and land price in contrast to Clusters 1 to 3 [Shrinkage]. Therefore, it can be considered that these factors of average income and land price are not so influential for the growth period of '1975 to 1995', differently from the shrinkage period of '1995 to 2015'.

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<sup>3</sup> Young population had been shifted into productive-age population during '1975 to 1995', resulting in the decrease of young population.

Looking at the spatial distribution of Clusters 1 to 3 [Growth] in Figure 6-8, Cluster 2 [Growth] of moderate growth can be found mainly within Tokyo's outer suburban territory, and Cluster 3 [Growth] of lower growth can be found mainly within the inner suburban territory. Hachioji City and Ome City are classified into Cluster 2 [Growth], and Tachikawa City into Cluster 3 [Growth]. It can be said that the outer suburban territory had served as an engine of suburban growth during '1975 to 1995'. Importantly, the relative dynamics between Tokyo's inner and outer suburban territories have turned inside out within the contextual transition from growth to shrinkage.

Moreover, Hamura City, Mizuho Town and Tama City are classified into Cluster 1 [Growth] of higher growth. As mentioned in Chapter 5, part of Tama City had been developed as a new town of TNT since the late 1960s; therefore, Tama City had rapidly grown during this period. In turn, Hamura City and Mizuho Town are located in-between the key outer suburban cities of Tachikawa City, Hachioji City and Ome City, as shown in Figure 6-8. The extent of development for Hamura City and Mizuho Town could be considered relatively lagging prior to the growth period of '1975 to 1995'. It could be considered that these in-between cities of Hamura City and Mizuho Town had rapidly grown to catch up these key outer suburban cities during '1975 to 1995', partly owing to spillover effects. This is a phenomenon captured from the viewpoint of flow, since Hamura City and Mizuho Town are relatively lagging even now, when compared to Tachikawa City, Hachioji City and Ome City. Therefore, whilst these in-between cities of Cluster 1 [Growth] had experienced the higher pace of growth, Hachioji City and Ome City of Cluster 2 [Growth], which had experienced relatively moderate growth, had served as the main suburban growth engine during '1975 to 1995'.

Cluster 4 [Growth] is an exceptional case, into which only Hinode Town is classified in the same way as Cluster 4 [Shrinkage] (see Figure 6-8). Simply, the overall performance of Cluster 4 [Growth] can be described as 'higher growth (economic mainly)'. Then, Okutama Town and Hinohara Village as peri-suburban municipalities are clustered into Cluster 5 [Growth] in the same way as Cluster 5 [Shrinkage] (see Figure 6-8). Simply, the overall performance of Cluster 5 [Growth] can be described as 'stagnation and/or decline'. Even during the growth period of '1975 to 1995', these peri-suburban cities had stagnated and/or declined.

In broad terms, looking at relationships between stock and flow variables for Clusters 1 to 3 [Growth], lagging suburban municipalities had tended to grow at a faster pace than affluent suburban municipalities. Therefore, it could be considered that gaps between affluent and lagging suburban municipalities had been increasingly narrowed during the growth period of '1975 to 1995'. This tendency during the growth period of '1975 to 1995' is entirely opposite to that during the shrinkage period of '1995 to 2015'.



Source: Author's own

Figure 6-7 Standardised Average Values of Representative Variables for Clusters 1 to 5 [Growth] during '1975 to 1995'

Table 6-5 Main Characteristics of Growth and/or Decline Types for Growth Period of '1975 to 1995'

Cluster Name		Cluster 1 [Growth]	Cluster 2 [Growth]	Cluster 3 [Growth]	Cluster 4 [Growth]	Cluster 5[Growth]
Overall Performance		Higher Growth	Moderate Growth	Lower Growth	Higher Growth (Economic Mainly)	Stagnation and/or Decline
Classified Suburban Municipalities	Inner	-	<ul style="list-style-type: none"> <li>● Higashikurume City</li> <li>● Inagi City</li> </ul>	<ul style="list-style-type: none"> <li>● Komae City</li> <li>● Musashino City</li> <li>● Mitaka City</li> <li>● Chofu City</li> <li>● Nishitokyo City</li> <li>● Koganei City</li> <li>● Kiyose City</li> <li>● Fuchu City</li> <li>● Kodaira City</li> <li>● Kokubunji City</li> <li>● Higashimurayama City</li> </ul>	-	-
	Outer	<ul style="list-style-type: none"> <li>● Tama City</li> <li>● Mizuho Town</li> <li>● Hamura City</li> </ul>	<ul style="list-style-type: none"> <li>● Higashiyamato City</li> <li>● Machida City</li> <li>● Musashimurayama City</li> <li>● Fussa City</li> <li>● Hachioji City</li> <li>● Akiruno City</li> <li>● Ome City</li> </ul>	<ul style="list-style-type: none"> <li>● Kunitachi City</li> <li>● Tachikawa City</li> <li>● Hino City</li> <li>● Akishima City</li> </ul>	● Hinode Town	<ul style="list-style-type: none"> <li>● Hinohara Village</li> <li>● Okutama Town</li> </ul>
Three P's Analytical Framework		<u>Higher Growth</u> <ul style="list-style-type: none"> <li>- Greater population increase (especially, productive-age and elderly population)</li> </ul>	<u>Moderate Growth</u> <ul style="list-style-type: none"> <li>- Relatively moderate population increase (especially, productive-age and elderly population)</li> </ul>	<u>Lower Growth</u> <ul style="list-style-type: none"> <li>- Lesser population increase especially, productive-age and elderly population)</li> </ul>	<u>Moderate Growth</u> <ul style="list-style-type: none"> <li>- Relatively moderate population increase (especially, productive-age and elderly population)</li> </ul>	<u>Decline/ Stagnation</u> <ul style="list-style-type: none"> <li>- Decrease of young and productive-age population</li> <li>- Lesser increase of elderly population</li> </ul>
		<u>Higher Growth</u> <ul style="list-style-type: none"> <li>- Greater increase of manufacturing production, commercial consumption, establishment and employment</li> <li>- Greater increase of land price</li> </ul>	<u>Moderate Growth</u> <ul style="list-style-type: none"> <li>- Relatively moderate increase of manufacturing production, commercial consumption, establishment and employment</li> <li>- Relatively moderate increase of land price</li> </ul>	<u>Lower Growth</u> <ul style="list-style-type: none"> <li>- Relatively moderate increase of manufacturing production</li> <li>- Lesser increase of commercial consumption, establishment and employment</li> <li>- Lesser increase of land price</li> </ul>	<u>Higher Growth</u> <ul style="list-style-type: none"> <li>- Greater increase of manufacturing production, commercial consumption, establishment and employment</li> <li>- Greater increase of land price</li> </ul>	<u>Lower Growth/ Stagnation</u> <ul style="list-style-type: none"> <li>- Lesser increase of manufacturing and commercial production</li> <li>- Stagnation of establishment and employment</li> <li>- Relatively moderate increase of land price</li> </ul>
		<u>Higher Growth</u> <ul style="list-style-type: none"> <li>- Greater increase of municipal tax revenue</li> <li>- Greater increase of social welfare expenditure</li> </ul>	<u>Moderate Growth</u> <ul style="list-style-type: none"> <li>- Relatively moderate increase of municipal tax revenue</li> </ul>	<u>Lower Growth</u> <ul style="list-style-type: none"> <li>- Lesser increase of municipal tax revenue</li> </ul>	<u>Higher Growth</u> <ul style="list-style-type: none"> <li>- Greater increase of municipal tax revenue</li> </ul>	<u>Lower Growth</u> <ul style="list-style-type: none"> <li>- Stagnation of municipal tax revenue</li> </ul>

Source: Author's own

Source: Author's own

Figure 6-8 Spatial Distribution of Clusters 1 to 5 [Growth] for Growth Period of '1975 to 1995'

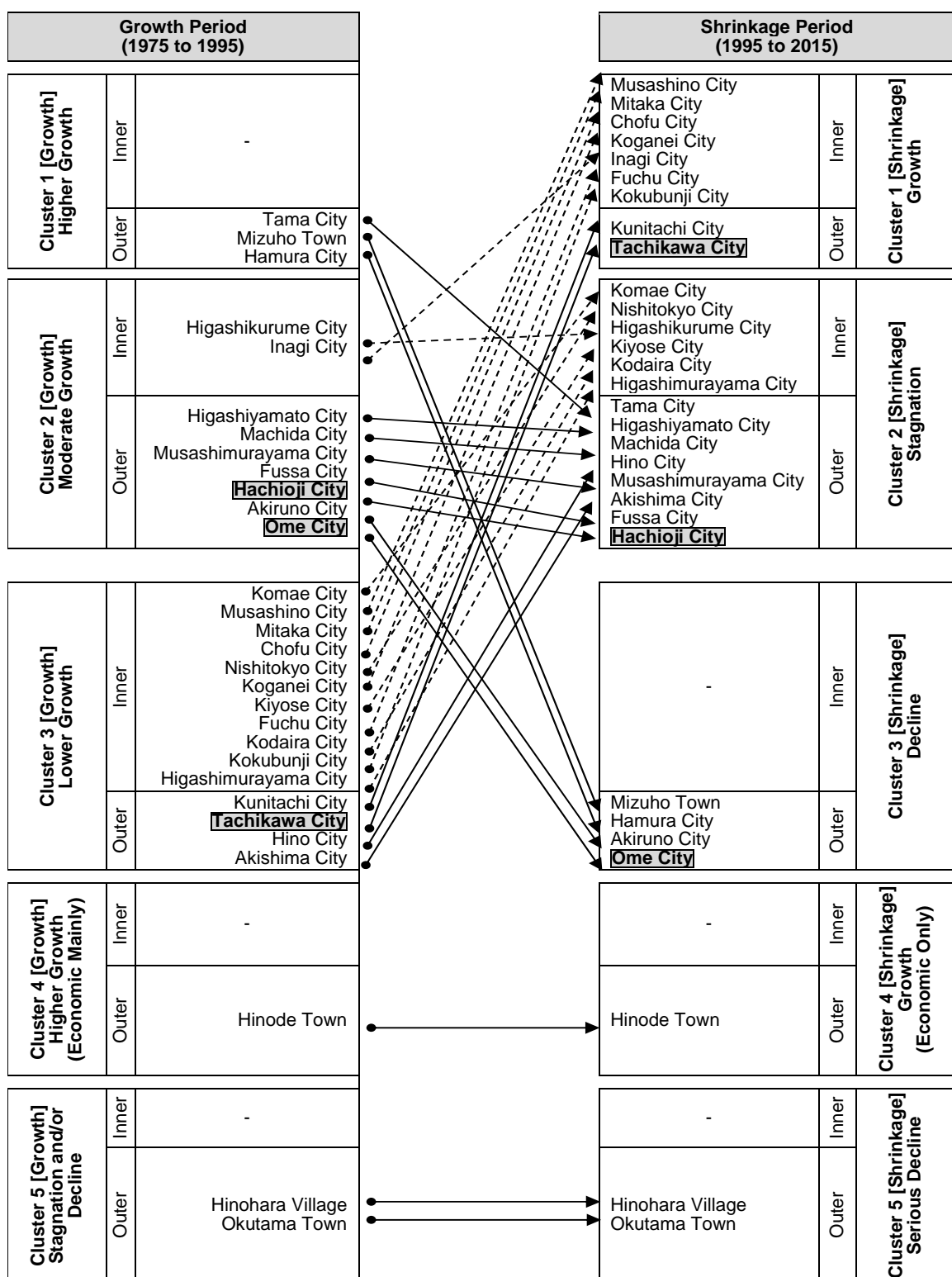
### **6.3.3 Identification of Different Trajectories of Suburban Municipalities from the Perspective of Long-term Development Paths**

The analysis results above identify different growth and/or decline types of suburban municipalities for each time period of '1975 to 1995' and '1995 to 2015', namely Clusters 1 to 5 [Growth] and Clusters 1 to 5 [Shrinkage]. Here, long-term development paths within the contextual transition from growth to shrinkage, which are referred as to different trajectories, are presented in Figure 6-9. In fact, suburban municipalities have experienced different trajectories shifting among different clusters. In these, Tachikawa City, Hachioji City and Ome City show different trajectories, namely: for Tachikawa City, from Cluster 3 [Growth] of lower growth to Cluster 1 [Shrinkage] of growth; for Hachioji City, from Cluster 2 [Growth] of moderate growth to Cluster 2 [Shrinkage] of stagnation, and for Ome City, from Cluster 2 [Growth] of moderate growth to Cluster 3 [Shrinkage] of decline.

## **6.4 Key Findings through Quantitative Approach: Review on Analysis Results of PCA and CA**

From the perspective of the three P's analytical framework, key findings are the following three features. Firstly, Tokyo's outer suburban territory has been increasingly 'impoverished' during the shrinkage period of '1995 to 2015', whilst the inner suburban territory has been increasingly 'enriched', namely from the perspective of short-term development paths. Simultaneously, the relative dynamics between inner and outer suburban territories have turned inside out within the contextual transition from growth to shrinkage, namely from the perspective of long-term development paths. Here, it should be remembered that the absolute order of prosperity has not been changed between these time periods of growth and shrinkage; that is, the outer suburban territory has continued to be less prosperous than the inner suburban territory in absolute terms. Secondly, there has emerged a new mode of suburban transformation during the shrinkage period of '1995 to 2015' with a view to the manner of interactions among the three P's. That is, the manner of their interactions has dramatically altered within the contextual transition from growth to shrinkage. Thirdly, outer suburban municipalities have been diverging within the contextual transition from growth to shrinkage, whilst inner suburban municipalities have been converging. That is, outer suburban municipalities have showed quite different, contrasted trajectories from the perspective of long-term development paths. These three key findings are detailed below.





Source: Author's own

Figure 6-9 Different Trajectories of Suburban Municipalities  
within Contextual Transition from Growth to Shrinkage

**A) Intra-suburban Differentiation: Increasingly Impoverished Outer Suburban Territory against Increasingly Enriched Inner Suburban Territory**

The first key finding is that the outer suburban territory has been increasingly 'impoverished', while the inner suburban territory has been increasingly 'enriched', during the shrinkage period of '1995 to 2015'. While this can be understood by the spatial distribution of Clusters 1 to 5 [Shrinkage], the relative dynamics between inner and outer suburban territories is summarised in Table 6-6 from an aggregate viewpoint. Looking at the spatial distribution of growth and/or decline types during the shrinkage period of '1995 to 2015', the outer suburban territory is dominated by Cluster 2 [Shrinkage] of stagnation and Cluster 3 [Shrinkage] of decline, whilst the inner suburban territory is dominated by Cluster 1 [Shrinkage] of growth and Cluster 2 [Shrinkage] of stagnation, as shown in Figure 6-4 above.

Moreover, from the perspective of long-term development paths, the relative dynamics between inner and outer suburban territories have turned inside out within the contextual transition from growth to shrinkage. During the growth period of '1975 to 1995', the outer suburban territory is dominated by Cluster 1 [Growth] of higher growth and Cluster 2 [Growth] of moderate growth, whilst the inner suburban territory is dominated by Cluster 3 [Growth] of lower growth, as shown in Figure 6-8 above. From the viewpoint of flow, this spatial distribution of growth and/or decline types during the growth period obviously shows that the outer suburban territory had been the front runner of suburban growth. However, entering the shrinkage period of '1995 to 2015', the inner suburban territory has exceeded the outer suburban territory (see Table 6-6). The following paragraphs more closely explore the relative dynamics between inner and outer suburban territories in relation to each of the three P's.

**a) From the Perspective of Socio-demographic Transformation (Population)**

During the shrinkage period of '1995 to 2015', the outer suburban territory has experienced more rapid increase of elderly population and more rapid decrease of young and productive-age population. This trend is observed especially for Cluster 3 [Shrinkage] of decline. Population aging and decline have progressed at a more rapid pace within the outer suburban territory by mutual causes of increased elderly population with lesser mobility and the social out-migration of young and productive-age population with greater mobility. This trend during the shrinkage period of '1995 to 2015' is almost opposite to that during the growth period of '1975 to 1995', in which the outer suburban territory, especially for Cluster 1 [Growth] of higher growth and Cluster 2 [Growth] of moderate growth, had experienced more rapid increase of productive-age population than the inner suburban territory. This socio-demographic phenomenon is more obviously witnessed by changes in the aging index, often used in demographic studies. The aging index is calculated as a ratio of elderly population (aged 65 and above) per young population (aged 0 to 14); therefore, the aging index represents the extent of population aging.

The aging index of the outer suburban territory against that of the inner suburban territory is as follows: 0.19 against 0.21 as of 1975, 0.73 against 0.89 as of 1995, and 2.06 against 1.81 as of 2015. In this way, population aging within the outer suburban territory has rapidly exceeded that of the inner suburban territory within the contextual transition from growth to shrinkage. Given this continuous trend, the outer suburban territory will continue to accelerate population aging at a faster pace than the inner suburban territory.

Table 6-6 Relative Dynamics between Inner and Outer Suburban Territories  
during '1975 to 1995' and '1995 to 2015'

Representative Variable		Urbanisation Phase		
		Growth Period (1975 to 1995)	Shrinkage Period (1995 to 2015)	
Three P's Analytical Framework	Socio-demographic Transformation (Population)	Overall Performance	Outer	Inner
		Population (Flow)	Inner (+) < <b>Outer (++)</b> (0.5% < 1.8%)	<b>Inner (++)</b> > Outer (+) (0.6% > 0.5%)
		Young Population (Flow)	Inner (--) < <b>Outer (-)</b> (-2.4% < -1.3%)	<b>Inner (+)</b> > Outer (-) (0.2% > -0.6%)
		Productive-age Population (Flow)	Inner (+) < <b>Outer (++)</b> (0.8% < 2.3%)	<b>Inner (-)</b> > Outer (--) (-0.1% > -0.5%)
		Elderly Population (Flow)	Inner (+) < <b>Outer (++)</b> (5.0% < 5.6%)	Inner (+) < <b>Outer (++)</b> (3.8% < 4.7%)
		Average Income (Flow)	Inner (+) < <b>Outer (++)</b> (4.8% < 5.0%)	<b>Inner (-)</b> > Outer (--) (-0.7% > -1.1%)
		Population Density (Stock) (as of 1985 and 2005)	Inner: 201.3 pers/ ha Outer: 149.5 pers/ ha	Inner: 203.8 pers/ ha Outer: 148.6 pers/ ha
	Economic Restructuring (Production)	Overall Performance	Outer	Inner / Outer
		Manufacturing Production (Flow)	<b>Inner (++)</b> > Outer (+) (6.4% > 5.8%)	Inner (--) < <b>Outer (-)</b> (-4.5% < -1.5%)
		Commercial Consumption (Flow)	Inner (+) < <b>Outer (++)</b> (7.3% < 8.4%)	Inner (--) < <b>Outer (-)</b> (-1.9% < -0.9%)
		Agricultural Production (Flow)	<b>Inner (-)</b> > Outer (--) (-0.5% > -1.9%)	<b>Inner (+)</b> > Outer (-) (0.4% > -1.6%)
		Employment (Flow)	Inner (+) < <b>Outer (++)</b> (2.3% < 3.5%)	Inner (+) < <b>Outer (++)</b> (0.0% < 0.5%)
		Establishment (Flow)	Inner (+) < <b>Outer (++)</b> (1.1% < 2.3%)	Inner (--) < <b>Outer (-)</b> (-0.4% < -0.1%)
		Land Price (Flow)	Inner (+) < <b>Outer (++)</b> (6.7% < 7.7%)	<b>Inner (-)</b> > Outer (--) (-1.9% > -2.4%)
	Employment Density (Stock) (as of 1985 and 2005)	Inner: 66.4 pers/ ha Outer: 52.7 pers/ ha	Inner: 67.7 pers/ ha Outer: 58.1 pers/ ha	
	Urban Policies (Political and Administrative - Fiscal) (Policies)	Overall Performance	Outer	Inner
		Municipal Tax Revenue (Flow)	Inner (+) < <b>Outer (++)</b> (7.9% < 9.2%)	Inner (++) > <b>Outer (+)</b> (0.6% > 0.3%)
		National Grants-in-aid (Flow)	<b>Inner (++)</b> > Outer (+) (4.3% > 3.6%)	Inner (+) < <b>Outer (++)</b> (4.7% < 5.1%)
		Local Allocation Tax (Flow)	Inner (+) < <b>Outer (++)</b> (0.1% < 2.8%)	<b>Inner (++)</b> > Outer (+) (3.1% > 1.9%)
		Metropolitan Grants-in-aid (Flow)	<b>Inner (++)</b> > Outer (+) (9.2% > 8.5%)	Inner (+) < <b>Outer (++)</b> (1.5% < 1.9%)
		Municipal Expenditure (Flow)	Inner (+) < <b>Outer (++)</b> (6.8% < 7.2%)	Inner (+) < <b>Outer (++)</b> (0.9% < 1.1%)
		Social Welfare Expenditure (Flow)	Inner (+) < <b>Outer (++)</b> (8.3% < 8.7%)	Inner (+) < <b>Outer (++)</b> (3.8% < 4.6%)
		Commercial and Industrial Expenditure (Flow)	Inner (+) < <b>Outer (++)</b> (7.3% < 8.5%)	<b>Inner (+)</b> > Outer (-) (1.3% > -0.3%)
		Public Work Expenditure (Flow)	<b>Inner (++)</b> > Outer (+) (9.6% > 7.7%)	Inner (--) < <b>Outer (-)</b> (-3.1% < -2.8%)

Source: Author's own

Moreover, during the shrinkage period of '1995 to 2015', the outer suburban territory, especially for Cluster 2 [Shrinkage] of stagnation and Cluster 3 [Shrinkage] of decline, has more greatly depreciated average income than the inner suburban territory, especially for Cluster 1 [Shrinkage] of growth. Here, it should be remembered that average income has steadily decreased within the entire suburban territory due to the continued economic recession. By contrast, during the growth period of 1975 to 1995', average income within the outer suburban territory had more rapidly increased than that within the inner suburban territory. Simultaneously, during the shrinkage period of '1995 to 2015', the number of publicly assisted households has more rapidly increased within the outer suburban territory, compared with the inner suburban territory. In these ways, the trend of socio-demographic transformation has turned inside out within the contextual transition from growth to shrinkage. In short, 'younger' outer suburban municipalities have relatively been getting 'older' along with relatively decreased average income, while 'older' inner suburban municipalities have been 'younger' along with relatively increased average income.

**b) From the Perspective of Economic Restructuring (Production)**

During the shrinkage period of '1995 to 2015', economic restructuring is more complex than socio-demographic transformation. This is due to industrial restructuring within entire Tokyo's suburban territory, in which the growth of service industries for elderly and medical care have occurred in parallel with the decline of manufacturing and commercial industries under continued deindustrialisation and diminished consumption activities. Simultaneously, during the shrinkage period of '1995 to 2015', there exist fewer differences between inner and outer suburban territories in economic terms (except for changes in land price), compared with the growth period of '1975 to 1995'. It is because both inner and outer suburban territories have faced economic stagnation over recent decades.

From the viewpoint of manufacturing production, manufacturing industries have steadily decreased their production during the shrinkage period of '1995 to 2015'. Here, the inner suburban territory, especially for Cluster 1 [Shrinkage] of Growth, has experienced the decline of manufacturing production at a faster pace, compared with the outer suburban territory. Yet, it is necessary to pay attention to the momentum of decline within the contextual transition from growth to shrinkage. Manufacturing production had grown within the outer suburban territory at a faster rate than the inner suburban territory during the growth period of '1975 to 1995'. Therefore, the momentum of its decline is comparatively large within the outer suburban territory which had previously relied on manufacturing industries during suburban growth.

From the viewpoint of commercial consumption, the entire suburban territory has faced its decline during the shrinkage period of '1995 to 2015', mainly due to the decrease of disposable household incomes and recent consumption behaviours with a stress on savings. In fact, even the revitalising inner suburban territory, even for Cluster 1 [Shrinkage] of Growth, has experienced the decline of commercial consumption. Whilst the inner suburban territory has enjoyed the increase of young and productive-age population with higher income levels during the shrinkage period of '1995 to 2015', this increase has not made significant contributions to expanding, or maintaining, commercial consumption. In turn, it is assumed that elderly people who have received pensions have contributed to slowing down the decline of commercial production within the outer suburban territory. However, during the growth period of '1975 to 1995', commercial consumption had steadily expanded, especially within the outer suburban territory. Therefore, the momentum of its decline within the contextual transition from growth to shrinkage is relatively higher within the outer suburban territory, compared with the inner suburban territory.

From the viewpoint of agricultural production, the inner suburban territory has experienced its increase during the shrinkage period of '1995 to 2015', differently from the outer suburban territory. Agricultural activities have almost disappeared within the entire suburban territory, as evidenced by the small share of primary-sector employment. However, there remain dispersed fragments of agricultural lands, especially within the inner suburban territory. This is because of the unrealised greenbelt, as explained in Chapter 5. Presumably, this trend of agricultural production has been buttressed by increased interests in urban farming with a slogan of 'local production for local consumption', as well as by the sixth-sector industrialisation made notable by Dr. Imamura specialised in agricultural economics.<sup>4</sup> However, it should also be emphasised that agricultural production is too small to contribute to the suburban economy.

Whilst manufacturing production and commercial consumption have steadily declined, the suburban economy has been reconfigured with growing social welfare industries especially for elderly and medical care. This has been reflected by the trend of employment and establishment during the shrinkage period of '1995 to 2015'. According to statistical data, employment absorption by industry from 2006 to 2014 within the entire suburban territory has changed as follows: from 13.1 to 10.7 percent for manufacturing industries; from 20.6 to 18.9 percent for wholesale and retail trade industries (commercial industries), and from 12.6 to 15.0 percent for medical, healthcare and other welfare industries. Significantly, the social welfare sector has gradually come to play a key role in employment absorption and establishment creation, especially within the outer suburban territory. Here, from the viewpoint of economic base analysis, manufacturing industries are classified into base industries with wider economic connections to external territories, and social welfare industries into non-base industries mainly

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<sup>4</sup> The sixth-sector industrialisation recently promoted by GOJ means the integration of primary, secondary and tertiary industries, aiming at the multilateralisation of agricultural producers into processing and distribution stages.

with local economic connections (Nakamura, 2014). Under the situation that growing social welfare industries (as non-base industries) have gradually replaced manufacturing industries (as base industries), the suburban economy has been increasingly localised, especially within the outer suburban territory.

Simultaneously, the number of suburban-to-urban commuters has gradually decreased. According to statistical data, the shares of suburban-to-urban commuters for the total commuters are as follows; as of 1995, 44.7 percent for the inner suburban territory, 21.5 percent for the outer suburban territory, and 2.1 percent for the peri-suburban territory; and as of 2005, 42.2 percent, 19.4 percent and 2.1 percent, respectively. This is partly due to the localisation of the suburban economy. As explained in Chapter 5, young people who have grown up within the suburban territory have tended to migrate into the urban territory, wishing to work in high-order service industries. The remaining suburban residents, such as housewives and elderly people with lesser mobility, do not make long commutes. These people have tended to work locally in growing social welfare industries. These mutual causes have resulted in the decrease in the number of suburban-to-urban commuters over recent decades.

From the viewpoint of land price, the inner suburban territory, especially for Cluster 1 [Shrinkage] of growth, has to a lesser extent decreased land prices during the shrinkage period of '1995 to 2015', compared with the outer suburban territory. Notably, land price has steadily continued to decline within the entire suburban territory under the continued economic recession. By contrast, during the growth period of '1975 to 1995', land price had continued to increase within the entire suburban territory. The outer suburban territory, especially for Cluster 1 [Growth] of higher growth and Cluster [Growth] of moderate growth, had increased land prices at a faster pace than the inner suburban territory, especially for Cluster 3 [Growth] of lower growth. Consequently, the trend of land prices during the shrinkage period of '1995 to 2015' is almost opposite to that during the growth period of '1975 to 1995'.

More closely looking at land price, the effect of changing land values is one of key aspects to understanding Tokyo's suburban transformation at both metropolitan and local levels. As mentioned above, from a metropolitan perspective, land prices between Tokyo's urban and suburban territories have been diverging during the shrinkage period of '1995 to 2015'. Simultaneously, from a local perspective, land price has served as a key factor to create different transformations of suburban municipalities in the context of shrinkage, as observed in Clusters 1 to 3 [Shrinkage]. Here, it should be remembered that the spatial distribution of Clusters 1 to 3 [Shrinkage] has been greatly affected by the railway network strongly associated with the patterns of land price. As mentioned in Chapter 5, under financial liberalisation and real estate securitisation taken place since the early 2000s, areas with higher land prices and greater densities of population and employment have attracted more property investments through securitised real estate (Kikuchi and Tani, 2013). These investments have taken place

through “very selective strategies of asset acquisition, both in functional and spatial terms” (Aveline-Dubach, 2014b: 268). Therefore, Tokyo's urban territory with higher land prices has more potential of attracting private-sector investments for both office and residential developments, resulting in the multi-dimensional urban-suburban divide. Moreover, even within Tokyo's suburban territory, affluent suburban municipalities with higher land prices have a more possibility of attracting private-sector investments especially for residential developments, resulting in a further widening between leading and lagging suburban municipalities. Thus, this has partly led to increases in the number of higher-income households and municipal tax revenues for affluent suburban municipalities, as observed in Cluster 1 [Shrinkage]. In short, changes in land price would have widened the multi-dimensional urban-suburban divide and even accelerated outer suburban divergence from the perspective of the three P's.

**c) From the Perspective of Urban Policies (Political and Administrative - Fiscal) (Policy)**

From a fiscal viewpoint, the inner suburban territory has been positioned in a better condition than the outer suburban territory during the shrinkage period of ‘1995 to 2015’. The inner suburban territory, especially for Cluster 1 [Shrinkage] of growth, has increased municipal tax revenue at a faster rate than the outer suburban territory. Municipal tax revenue has already begun to decline within part of the outer suburban territory, especially for some suburban municipalities classified into Cluster 3 [Shrinkage] of decline. During the growth period of ‘1975 to 1995’, the outer suburban territory had steadily increased municipal tax revenue at a faster pace than the inner suburban territory, as observed in Cluster 1 [Growth] of higher growth and Cluster 2 [Growth] of moderate growth. Therefore, the trend of municipal tax revenue during the shrinkage period of ‘1995 to 2015’ is also opposite to that during the growth period of ‘1975 to 1995’. However, there is an inter-governmental financial coordination system mainly through local allocation tax, in which GOJ makes financial supports depending on the fiscal conditions of municipal governments. Therefore, decreased municipal tax revenues do not necessarily indicate serious fiscal problems of municipal governments. However, decreased municipal tax revenues would gradually affect the quality of their public administration in the long term, and this situation will be worsened due to the continuously weakening fiscal condition of GOJ.

From an inter-governmental perspective of the revenue side, some stagnating suburban municipalities seem to increase their dependence on GOJ through local allocation tax. This needs a more careful investigation, because there exist great variances in the annual growth rates of local allocation tax for suburban municipalities classified into Cluster 2 [Shrinkage] of stagnation. However, it would be assumed that stagnating suburban municipalities might more seriously struggle with increasingly widened gaps between their revenue capacities and increased demands of public services, compared with growing or declining suburban municipalities. Here, this does not mean that declining suburban municipalities, such as Cluster

3 [Shrinkage] of decline, have better fiscal conditions than stagnating municipalities. Most declining suburban municipalities have already received financial supports from GOJ even before the shrinkage period of '1995 to 2015', sometimes resulting in lower annual growth rates of local allocation tax. Overall, the outer suburban territory, which is dominated by Cluster 2 [Shrinkage] of stagnation and Cluster 3 [Shrinkage] of decline, has more seriously faced fiscal shortage than the inner suburban territory. Simultaneously, it could be considered that part of the inner suburban territory, which is mainly characterised by Cluster 2 [Shrinkage] of stagnation, has also begun to struggle with their fiscal conditions.

From an inter-sectoral perspective of the expenditure side, all suburban municipalities have increased social welfare expenditures during the shrinkage period of '1995 to 2015'. The outer suburban territory has experienced this increase at a faster pace than the inner suburban municipalities, due to rapidly magnified demands on elderly and medical care. The inter-sectoral relationship among different policy domains has dramatically altered within the contextual transition from growth to shrinkage. On average, for the entire suburban territory, the shares of public work expenditure, commercial and industrial expenditure and social welfare expenditure against the total expenditure are as follows: 19.6, 0.8, and 22.0 percent as of 1985, and 12.5, 0.6 and 36.4 percent as of 2005. In this way, the share of social welfare expenditure has dramatically increased in accordance with the decrease in the share of public work expenditure within the contextual transition from growth to shrinkage. It would be assumed that some suburban municipalities, especially those of Cluster 2 [Shrinkage] of stagnation, have reduced public work expenditures to cope with increased social welfare expenditures over recent decades. Here, the share of commercial and industrial expenditure has continued to be comparatively very small in both time periods of growth and shrinkage. This trend of commercial and industrial expenditure is relevant to both inner and outer suburban territories.

This tendency is also observed in the dependency ratio, often used in demographic studies. The dependency ratio is calculated as a ratio of dependents, namely the sum of young population (aged 0 to 14) and elderly population (aged 65 and above) against productive-age population (aged 15 to 64); therefore, the dependency ratio represents socio-economic pressures on productive-age population and fiscal pressures on municipal governments. The dependency ratio of the outer suburban territory against that of the inner suburban territory are as follows; 0.49 against 0.43 as of 1975, 0.35 against 0.34 as of 1995, and 0.61 against 0.54 as of 2015. During the growth period of '1975 to 1995', the outer suburban territory had recorded reductions in the dependency ratio to reach a parity with the inner suburban territory. However, during the shrinkage period of '1995 to 2015', the dependency ratio has increased at a faster pace than the inner suburban territory. This trend indicates that the outer suburban territory has faced more socio-economic pressures on productive-age population and difficulties of maintaining the current level of public administration, when compared to the inner suburban territory.



## **B) Emergence of New Mode of Suburban Transformation: New Manner of Interactions among Three P's under Suburban Shrinkage**

The second key finding is that there has emerged a new mode of suburban transformation during the shrinkage period of '1995 to 2015', which is different from the past mode during the growth period of '1975 to 1995'. This can be observed by the manner of interactions among the three P's, which has radically altered within the contextual transition from growth to shrinkage. Let us compare Figures 6-2 and 6-6 above with attention to the directional arrows of original variables. The key directional arrows during the shrinkage period of '1995 to 2015' have become more divergent, compared with those during the growth period of '1975 to 1995'. During the growth period of '1975 to 1995', the arrow directions of population, employment and establishment, and municipal tax revenue are similar, as shown in Figure 6-2. That is, during the growth period, three P's had tended to grow in a synchronised way. Especially, the three P's of outer suburban municipalities had more rapidly grown, compared with those of inner suburban municipalities. This is observable in Cluster 1 [Growth] of higher growth and Cluster 2 [Growth] of moderate growth in comparison to Cluster 3 [Growth] of lower growth. Outer suburban municipalities had relatively experienced a virtuous spiral of growth during the growth period of '1975 to 1995'. In this sense, the mode of suburban transformation during the growth period is relatively simple. However, this synchronisation among the three P's has disappeared during the shrinkage period of '1995 to 2015', partly observed by the fact that the arrow directions of population, employment and establishment, and municipal tax revenue become different. The mode of suburban transformation during the shrinkage period has become more complicated. To grasp this more precisely, let us investigate interactions among the three P's during the shrinkage period of '1995 to 2015' from a political and administrative perspective.

Let us look at the revenue side of municipal governments. Municipal tax revenue is the main source of municipal revenue; here, municipal tax revenue is not identical to municipal revenue. Generally, municipal tax revenue of a given municipal government is mainly comprised of resident tax, corporate inhabitant tax and property tax. Here, corporate inhabitant tax is different from corporate tax, as one of national taxes to be collected by GOJ. In simple terms, resident tax can be related to population and average income; corporate inhabitant tax to establishment (and employment); and property tax to land price. According to Ichizyo (2013), the shares of resident tax, corporate inhabitant tax, property tax, and other taxes for the municipal tax revenue of Mitaka City (in the inner suburban territory) respectively account for 48.3, 4.9, 35.2, and 11.6 percent as of 2008. Broadly, this tendency could be applied to all suburban municipalities. Looking at this composition, it can be understood that resident tax and property tax serve as the major sources of municipal tax revenue, having greater shares than corporate inhabitant tax.

On average, with regard to municipal tax revenue, the outer suburban territory has been positioned in a less favourable condition during the shrinkage period of '1995 to 2015',

compared with the inner suburban territory. Keeping in mind the composition of municipal tax revenue above, let us compare Cluster 2 [Shrinkage] of stagnation and Cluster 3 [Shrinkage] of decline with Cluster 1 [Shrinkage] of growth. Differences in municipal tax revenue have been caused mainly by those in population and average income (related to resident tax) and land price (related to property tax). Notably, the trends of young and productive-age population, average income, and land prices have tended to be positively correlated. During the shrinkage period of '1995 to 2015', Cluster 1 [Shrinkage] of growth has attracted young and productive-age populations with higher income levels. Cluster 1 [Shrinkage] of growth has successfully kept its decrease to a lesser extent than Cluster 2 [Shrinkage] of stagnation and Cluster 3 [Shrinkage] of decline. These have resulted in the better conditions of municipal tax revenue within the inner suburban territory, especially for Cluster 1 [Shrinkage] of growth.

Broadly, establishment and employment have stagnated in both inner and outer suburban territories. Yet, recent growing social welfare industries have contributed to creating establishment and employment, especially within the outer suburban territory. Simultaneously, the inner suburban territory has faced more impacts of deindustrialisation. It could be assumed that these have resulted in fewer differences between inner and outer suburban municipalities in terms of corporate inhabitant tax. Moreover, corporate inhabitant tax related to establishment (and employment) has a relatively small share in municipal tax revenue. Therefore, differences in municipal tax revenue during the shrinkage period of '1995 to 2015' have been generated by differences in population and average income (related to the residence tax) and land price (related to the property tax), rather than establishment and employment (related to corporate inhabitant tax).

Presumably, there seems to exist a specific process during the shrinkage period of '1995 to 2015', in which stagnating outer suburban municipalities have been to some extent destined to delay their notice of decreases in municipal tax revenue. There exists a specific economic restructuring process under suburban shrinkage, in which manufacturing and commercial industries have been gradually replaced by social welfare industries for elderly and medical care, which have created establishment and employment. This economic restructuring would appear within the contextual transition from growth to shrinkage, especially within the outer suburban territory. It might be said that the growth of social welfare industries would delay decreases in municipal tax revenue through corporate inhabitant tax, even though resident tax and property tax are more influential factors. This might result in the delay of municipal government's serious recognition about impending economic degradation. As observed in the peri-suburban territory, especially for Cluster 5 [Shrinkage] of serious decline, it is expected that at the ultimate phase of decline, the mode of population decline would shift from the social decrease of young and productive-age population to the natural decrease of elderly population. In this situation, social welfare industries would not much grow due to fewer demands for elderly and medical care. Therefore, it could be assumed that stagnating outer suburban municipalities

would be destined to suffer more sudden, rapid fiscal deterioration than they might expect in the future. However, whilst it is necessary to take actions before entering the phase of serious decline, stagnating outer suburban municipalities might tend to be less motivated to take actions due to this delayed recognition.

Besides, corporate inhabitant tax has a lesser share of municipal tax revenue, compared with residence tax and property tax. Presumably, due to this composition, economic shrinkage (except for the changes of land price) seems not to be strongly reflected in the changes of municipal tax revenue, compared with socio-demographic shrinkage. This might also explain why stagnating outer suburban municipalities tend to only slowly recognise the problems of economic shrinkage. As previously explained, industrial and commercial expenditure has a smaller share of the total municipal expenditure, compared with public work and social welfare expenditures in both time periods of growth and shrinkage. Moreover, there are few differences in the changes of industrial and commercial expenditure among Clusters 1 to 3 [Growth], as well as among Clusters 1 to 3 [Shrinkage]. In the inter-sectoral rebalancing process of municipal expenditure under suburban shrinkage, stagnating suburban municipalities seem to reduce public work expenditure against increased social welfare expenditure without considerable changes in commercial and industrial expenditure. Simultaneously, municipal governments seem to have no capacities to increase commercial and industrial expenditure. In this situation, the increase of establishment and employment seems not to be greatly reflected in the increase of municipal tax revenue through corporate inhabitant tax. Consequently, the structure of the taxation system itself might have led to little motivation for suburban municipalities to proactively engage in industrial and commercial promotion, in addition to limited unfavourable impacts on municipal tax revenue thanks to growing social welfare industries.

### **C) Divergence of Outer Suburban Municipalities against Convergence of Inner Suburban Municipalities**

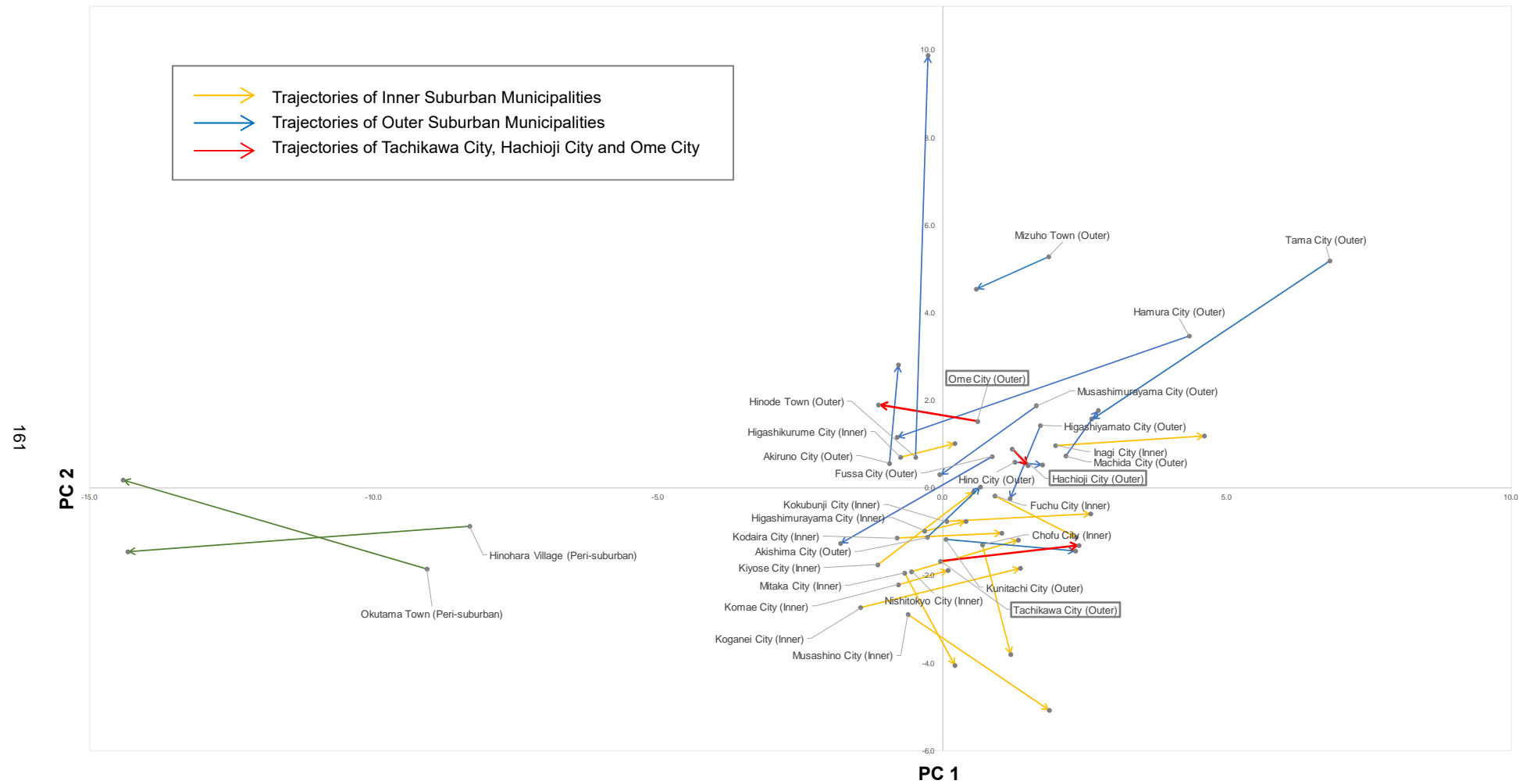
The third key finding is that from the perspective of the three P's, outer suburban municipalities have been diverging within the contextual transition from growth to shrinkage, whilst inner suburban municipalities have been converging. This radical restructuring of the outer suburban territory has incorporated the different trajectories of outer suburban municipalities from the perspective of long-term development paths. While their different trajectories are shown by the transitions among different cluster types in Figure 6-9 above, these trajectories can be more obviously visualised on the new coordinate system of PCs. Figure 6-10 illustrates their trajectories within the contextual transition from the growth period of '1975 to 1995' to the shrinkage period of '1995 to 2015'. In this figure, the X-axis denotes the PC1 axis, and the Y-axis denotes the PC2 axis for the shrinkage period of '1995 to 2015'. By using PC Loadings of the shrinkage period of '1995 to 2015', PC1 and PC2 Scores for suburban municipalities during the growth period of '1975 to 1995' are calculated to plot their positions on the same platform of

PC1 and PC2 axes of the shrinkage period of '1995 to 2015'. In this figure, the origin of each directional arrow denotes a position of a given suburban municipality during the growth period of '1975 to 1995', and its destination denotes a position of the same suburban municipality during the shrinkage period of '1995 to 2015'. Therefore, each directional arrow shows how each suburban municipality has shifted within the contextual transition from growth to shrinkage in relative terms.

As shown in Figure 6-10, there can be observed remarkable differences between inner and outer suburban municipalities from the perspective of long-term development paths. Outer suburban municipalities (denoted by red and blue directional arrows) have shifted in different directions and by contrast, inner suburban municipalities (denoted by yellow directional arrows) have shifted in similar directions towards the growth side (namely, towards the right-hand side of Figure 6-10). That is, outer suburban municipalities have shown a greater extent of divergence than inner suburban municipalities from the perspective of the three P's. The divergence of outer suburban municipalities against the convergence of inner suburban municipalities could be conceived as a temporal phenomenon of some sort, or "temporal disparity" (Phelps and Wu, 2011: 2), appeared within the contextual transition from growth to shrinkage. Given that suburban shrinkage will continue in the future, it is assumed that all directional arrows will move towards the decline side (namely, towards the left-hand side of Figure 6-10). In this process, it is probable that inner suburban municipalities will experience divergence, and simultaneously outer suburban municipalities will experience convergence. Therefore, outer suburban divergence should be considered as the temporal phenomenon appeared within the contextual transition from growth to shrinkage. It would be said that theoretically, this divergence and convergence process might be an important aspect of suburban transformation.

## **6.5 Selection of Case Studies: Different Trajectories of Tachikawa City, Hachioji City and Ome City**

In the process of outer suburban divergence, Tachikawa City, Hachioji City and Ome City have experienced contrasted, different trajectories, as shown by red directional arrows in Figure 6-10. In broad terms, these three cities can be respectively characterised by 'growth', 'stagnation' and 'decline' from the perspective of the three P's. As explained in Figure 6-9 above, these three cities have experienced different transitions from Clusters 1 to 3 [Growth] to Clusters 1 to 3 [Shrinkage] from the perspective of long-term development paths. Besides, even from the perspective of short-term development paths, Tachikawa City, Hachioji City and Ome City during the shrinkage period of '1995 to 2015' are respectively classified into different clusters, namely: Cluster 1 [Shrinkage] of growth, Cluster 2 [Shrinkage] of stagnation and Cluster 3 [Shrinkage] of decline. Therefore, these three cities are selected as case studies to more deeply investigate the causal relationships of outer suburban divergence.



Source: Author's own

Figure 6-10 Different Trajectories: Outer Suburban Divergence against Inner Suburban Convergence

## **6.6 Chapter Conclusion: Necessity to Explore Outer Suburban Divergence under Multi-dimensional Urban-suburban Divide Captured from the Perspective of Three P's**

The urban-suburban dynamics of Tokyo Metropolis has shifted from convergence to divergence within the contextual transition from growth to shrinkage. In this situation, the quantitative approach identifies the following key findings from the perspective of the three P's. Firstly, overall, Tokyo's outer suburban territory has been increasingly 'impoverished' during the shrinkage period of '1995 to 2015', whilst the inner suburban territory has been increasingly 'enriched'. Simultaneously, the relative dynamics between inner and outer suburban territories have turned inside out within the contextual transition from growth to shrinkage. Secondly, there has emerged the new mode of suburban transformation during the shrinkage period of '1995 to 2015', which can be captured as the new manner of interactions among the three P's. Finally, outer suburban municipalities have been diverging within the contextual transition from growth to shrinkage, whilst inner suburban municipalities have been converging. In this outer suburban divergence, Tachikawa City, Hachioji City and Ome City have experienced different trajectories, which are respectively characterised by 'growth', 'stagnation' and 'decline'. Therefore, taking account of the new mode of suburban transformation in the context of shrinkage, it is important to explore the underlying mechanisms of urban-suburban divergence (metropolitan level) and outer suburban divergence (local level) through the qualitative approach.

## **Chapter 7**

# **Anatomising Suburban Restructuring of Tokyo Metropolis from a Metropolitan Perspective through Qualitative Approach**

### **7.1 Chapter Introduction**

This chapter explores recent Tokyo's suburban restructuring from a metropolitan perspective through the qualitative approach, paying attention to underlying political and policy dynamics. Tokyo's suburban territory has increasingly faced the multi-dimensional urban-suburban divide in terms of the three P's. In this situation, it is crucial to explore the underlying mechanisms of this divide. For this purpose, it is essential to recognise that Tokyo's suburban restructuring has been materialised by multi-layered locational restructuring created by different actors. Recently, different actors have re-configured their perspectives and scopes depending on their rationalities and strategies, when responding to the new conditions of suburban shrinkage. Different actors have moved in multiple directions and within different spatial scales, depending on their causal relationships and mobile capabilities. Simply, different actors could be divided into those with greater or lesser mobility; greater mobile actors move within wider spaces, and lesser mobile actors move within narrower spaces. Greater mobile actors could be upper-level governmental entities on the political and administrative side, large-scale global enterprises on the economic side, and higher-income households and more footloose singles (especially those rooted in newcomer communities) on the socio-demographic side. Lesser mobile actors could be municipal governments, local SMEs, and lower-income households and elderly people (especially those rooted in traditional communities). Thus, exploring this multi-layered locational restructuring, it is revealed that the multi-dimensional suburban isolation in terms of the three P's, including the urban-suburban divide, has been created by the specific metropolitan-wide dynamics of the three I's. This metropolitan-wide isolation process is referred to as 'suburban balkanisation'. Considering these, it is argued that new modes of suburban economic development with multi-dimensional urban-suburban linkages should be established to prevent further 'suburban balkanisation'.

### **7.2 Retreat from Polycentricity: Failure to Foster Suburban Resilience against Shrinkage**

Firstly, it should be recognised that Tokyo's suburban territory has failed to form strong suburban centres prior to the back-to-the-city movement. This failure has been created by multiple reasons. The political and policy shift on the metropolitan city centre has implicitly

expressed the intention of upper-level governmental entities to retreat from metropolitan-wide polycentricity, which has still been pursued officially (Interview No. 10). In fact, GOJ, namely MLIT, already abolished an administrative section in charge of metropolitan-wide spatial planning and development (Interview No. 10). Alongside this, upper-level governmental entities have promoted the compact city strategy, justifying their retreats as one appropriate action for metropolitan-wide compactisation.

From the viewpoint of polycentric formation, the Greater Tokyo Area is the only successful case in Japan (Interview No. 3). However, the retreat of upper-level governmental entities began prior to the sufficient maturity of polycentricity, as one professor commented:

“GOJ had promoted polycentric formation through the dispersion of government offices such as the relocation of regional offices of some ministries especially in the 1990s. However, alongside the decreased demands of office floor spaces after the collapse of the bubble economy, the back-to-the-city movement began before polycentricity was sufficiently achieved, namely before private enterprises would relocate their offices to reside near the dispersed government offices. According to an extant research, the total of traveller distances within the Greater Tokyo Area has increased, indicating the inefficiency of the metropolitan-wide transport system...In Japan, face-to-face communications especially with GOJ are important for private-sector entities to receive governmental aids and obtain formal or informal information for their businesses. Therefore, their offices prefer to locate in the Marunuchi Area closest to the Kasumigaseki Area of GOJ. Even within the Special Ward Area, the locational advantages of either the Shinjuku Area or Shinagawa Area are much weaker than those of the Marunouchi Area.” (Interview No. 3)

Different cities worldwide have different balances between centripetal and centrifugal forces. Intrinsically, the Greater Tokyo Area has relatively strong centripetal forces against centrifugal forces. In fact, the back-to-the-city movement has more strongly occurred within the Greater Tokyo Area, compared with the Osaka and Nagoya metropolitan areas (MLIT, 2006). Under the centralised political and administrative system of Japan, corporate headquarters have preferred to locate within the metropolitan city centre. In addition, companies have traditionally reimbursed commuting costs of their employees, so there are few incentives for employees to reside near their offices, even if being relocated into the suburban territory (Interview No. 15). Therefore, polycentric formation within the Greater Tokyo Area would be more difficult due to relational forces among governmental entities, private-sector companies and their employees. Nevertheless, the recent upper-level governmental entities' actions have increasingly strengthened the magnetic powers of the metropolitan city centre.

Notwithstanding this difficulty of polycentric formation, Japan did not implement any locational control for offices, differently from the UK. One reason is that GOJ and TMG were worried about whether it would hinder economic growth (Interview No. 11). Besides, there were some political concerns, as the professor continued:



“In my view, the reasons why the past locational control did not target office functions include political considerations. To target offices, GOJ needed to communicate with the industrial community consisting of large-scale enterprises with substantial influences on the political community. Differently from offices, large-scale factories had already located within the urban territory at the timing of enforcement of the relevant law for locational control. Since pre-existing factories were not affected by this law, there created little conflicts between industrial and political communities. Therefore, the locational control of manufacturing factories could build consensus among stakeholders more easily than that of offices that just began to accumulate within the urban territory at that time.” (Interview No. 10)

In replace, GOJ has set up the policy measures for the BCCs. However, as detailed in Chapter 5, there was the lack of swift governmental actions (Miyake, 2005a). Simultaneously, the policy measures for the BCCs have been not sufficient for the formation of large suburban centres, as the public official of Tachikawa City Government commented:

“Considering the following three factors of 1) the policy measures for the BCCs, 2) availability of large-scale developable lands, and 3) transportation accessibility, the most important factor for our success is land availability, being followed by transport accessibility. Large-scale developable lands close to the city centre became available at the best timing by the handover of the former US Tachikawa Air Base to Japan.<sup>1</sup> Consequently, Tachikawa City with geographical advantages was successful to be targeted for the consolidation of public facilities of upper-level governmental entities. The policy measures for the BCCs are not so useful to our city. However, these have good side effects. The designation as one of the BCCs has been beneficial when negotiating with upper-level governmental entities for subsidies and appealing to attract private enterprises.” (Interview No. 2)

Moreover, another public official of Tachikawa City Government commented;

“In my view, one failure in the policy measures for the BCCs is that these measures do not include direct subsidies from GOJ. The other problem is that I could not clearly explain the benefits of the BCCs to our local residents (apart from the proximity between workplace and residence). Consequently, we could not create proactive movements together with our local community for the formation of the strong BCC.” (Interview No. 29)

Whilst Tachikawa City is one of the successful BCCs (Interview No. 3), the policy measures for the BCCs have not been beneficial even to Tachikawa City. Municipal governments designated as the BCCs have formed a city-to-city consortium to appeal their requests to GOJ, but it does not bring out desirable outcomes due to less political powers (Interview No. 2). Not only GOJ in charge of the policy measures for the BCCs, but also TMG faced some limitations in the formation of suburban centres, as the former public official of TMG commented:

“In my impression, one reason for a failure to develop large suburban centres in the Tama Area is the concept of greenbelts planned to cover the inner suburban territory. Whilst this concept was unrealised, it implicitly constrained our way of thinking about the development of suburban centres within the inner suburban territory. Therefore,

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<sup>1</sup> The Tachikawa Airfield of GOJ (opened in 1922) became to be owned by the US as the Tachikawa Air Base after the WWII. All sites in this base were returned to GOJ in 1977. However, redevelopment projects began mainly in the late 1980s.

the outer suburban territory was the only option for this sort of development, but it is too distant from the metropolitan city centre...Moreover, we were always reactive to rapid urbanisation. Housing provision was a much more urgent issue at that time (rather than the formation of suburban centres)...Moreover, the lack of suitable lands was another problem. Whilst TNT was one option, TMG could not use suitable lands owned by the former Japan Housing Corporation (presently, UR), alongside the legal constraint.<sup>2</sup> (Interview No. 21)

Besides, Tokyo's suburban territory currently designated as the West Core has smaller hinterlands with lesser potential for the formation of suburban centres, compared with the South, East and North Cores in the Greater Tokyo Area (Interview No. 39). Moreover, one public officials of Ome City point out the delayed decentralisation of planning powers related to zoning designation, suggesting that TMG designated less office and commercial zones within Tokyo's suburban territory (Interview No. 30). In this way, Tokyo's suburban territory has failed to form strong suburban centres due to multiple reasons. Consequently, it has failed to foster better industrial hierarchies in the form of ensuring sufficient resilience prior to the back-to-the-city movement. This failure would affect suburban affairs in the long term, making Tokyo's suburban territory more subject to multi-layered locational restructuring under suburban shrinkage.

### **7.3 Recently Emerged Divergence of Greater Mobile Actors**

Very recently, Tokyo's suburban territory has faced the divergence of the perspectives and scopes of greater mobile actors, namely GOJ, TMG and large-scale enterprises. Consequently, the multi-dimensional urban-suburban divide has entered a new stage since the 2010s. In simple terms, there are the following features of this divergence from a long-term perspective: 1) as for GOJ, from suburban through urban to provincial areas; 2) as for TMG, from suburban to urban areas; and 3) as for large-scale enterprises, from suburban through urban to overseas areas. The recent destinations of their concerns have been quite differentiated. In the early 2000s, the interests among GOJ, TMG and private developers converged within Tokyo's urban territory (Buhnik, 2017). Now, the divergence of their interests has newly emerged especially after the middle 2010s.

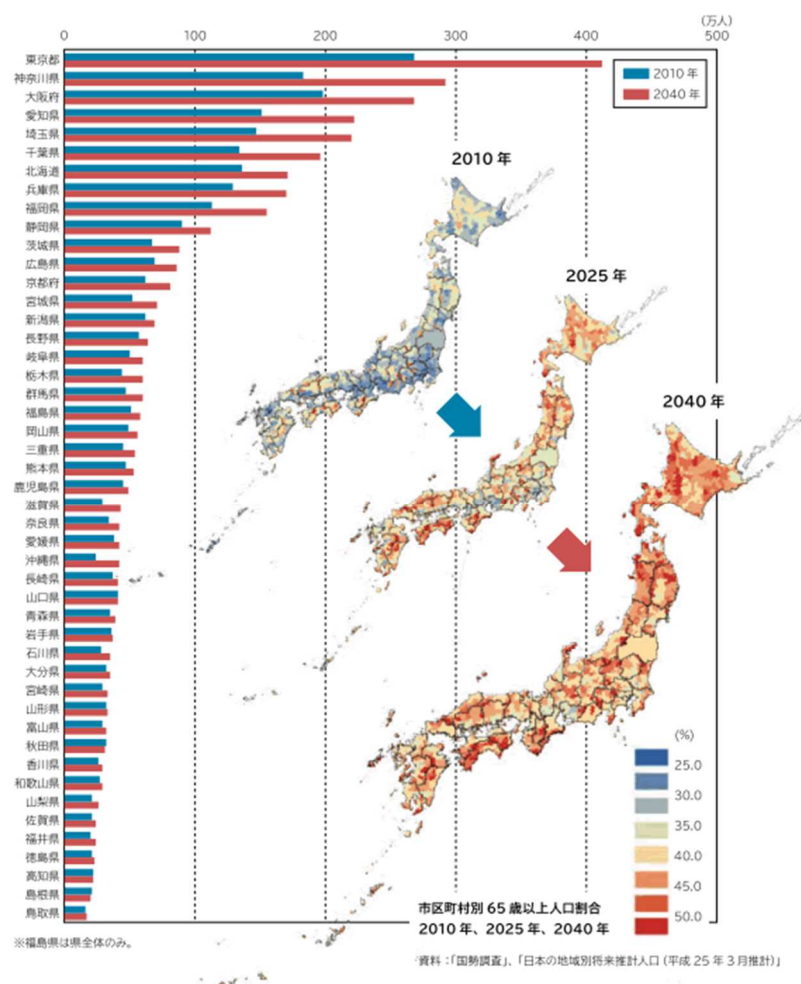
#### **7.3.1 Political and Policy Shift of GOJ towards Provincial Areas**

Since the 2010s, the revitalisation of provincial areas has come to the fore as one of the important political and policy agendas of GOJ. This is a crucial change, which has affected political and policy actions of lower-level governmental entities. Whilst Tokyo Metropolis has still

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<sup>2</sup> As for the legal constraint, the New Urban Residential Area Development Law of 1963 did not initially allow business-purpose developments in TNT. After its revision in 1986, some command-and-control functions, including the Tokyo headquarters of Benesse Corporation that offers correspondence education services especially for children, have resided in TNT. Tokyo's suburban territory failed to utilise the labour forces of females with higher education due to the lack of suitable workplaces (Chiikisōgōkenkyūjo. ed., 1989). Yet, this Benesse Corporation has been a successful case to utilise these workforces (Interview No. 21).

been growing to some extent through rural-urban migration, Japan itself has already started population decline around 2005. The devastation of provincial areas has become foreseeable, as evidenced by IPSS (2012)'s nation-wide projection of population aging in Figure 7-1. In this situation, GOJ has felt it urgent to achieve the 'self-containment' of each provincial area to restrain rural-urban migration into the Greater Tokyo Area (Interview No. 16). In this vein, GOJ led by Prime Minister Mr. Abe enacted the Law on Revitalisation of Cities, People and Jobs of 2014, as well as made the 2017 revision of the Law on Regional Regeneration of 2005. Thus, it established the Headquarter for Overcoming Population Decline and Vitalising Local Economy in Japan within the Cabinet Office in 2014, and set up a new ministerial position called the Minister of State for the Promotion of Overcoming Population Decline and Vitalising Local Economy in Japan in 2015. Simultaneously, GOJ has begun to use a new slogan of 'Dynamic Engagement of All Citizens' for the creation of a society where all the Japanese can work together for the future success. Thus, GOJ set up a new ministerial position called the Minister in Charge of Promoting Dynamic Engagement of All Citizens in 2015. The slogan itself expresses GOJ's concern about the whole nation, especially provincial areas.



Source: IPSS (<http://www.ipss.go.jp/pr-ad/j/jap/03.html>)

Figure 7-1 Nation-wide Projection of Population Aging

To promote provincial revitalisation, GOJ has recently decided to relocate the Agency for Cultural Affairs into Kyoto City, the former capital city located in the middle part of Japan, in the future (Nikkei, 2016a). This sort of relocation that involves strong political conflicts is difficult to realise; in fact, the relocation of other agencies was recently discussed, but already rejected. Moreover, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has announced their intention to regulate the capacity increase of private universities within Tokyo's urban territory to prevent the out-migration of young people from provincial areas (Nikkei, 2017d). In these ways, GOJ has taken concrete actions for provincial revitalisation.

Simultaneously, GOJ has continued to stress the metropolitan city centre, promoting further structural changes to attract foreign human and/or non-human capitals, as detailed in Chapter 5. However, from another viewpoint, GOJ has exploited the metropolitan city centre to revitalise provincial areas since the late 2000s; for instance, it has promoted fiscal redistributions from wealthy metropolitan areas into poorer provincial areas. In this regard, Mr. Masuda argued the necessity to reduce inequalities between metropolitan and provincial areas during his term of office as the minister of MIAC during 2007 to 2008. He temporarily established a taxation system of special local corporation tax in 2008, which promoted inter-prefectural redistributions of part of enterprise tax on corporations. Consequently, the tax revenue of TMG was partially redistributed to local governments in provincial areas. Moreover, GOJ has established the hometown tax payment program, or 'benefit-your-locality' tax scheme, in 2008, in which taxpayers can choose to divert part of residential tax into other municipal governments, especially for those in provincial areas. Tokyo's local governments have been hurt by this program; some of them, especially special ward governments, have faced serious declines in their tax revenues (Nikkei, 2017b).<sup>3</sup> As such, GOJ has exploited Tokyo Metropolis to reduce nation-wide inequalities and revitalise provincial areas, alongside the strengthening of the metropolitan city centre.

The recent actions of GOJ have manifested an increased shift towards provincial areas. GOJ has fallen into a dilemma between international and domestic forces, namely between the necessities of strengthening global competitiveness and revitalising provincial areas. Confronting serious provincial shrinkage, GOJ has become unable to avoid stressing provincial revitalisation. Whilst the concept of nation-wide balanced developments has long existed, the recent unprecedented devastation of provincial areas has forced GOJ to more seriously shed light on provincial areas than ever before. Consequently, there would be a possibility of creating some political and policy conflicts between GOJ and TMG in the future.

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<sup>3</sup> However, financial supplies from parents in provincial areas towards university students in metropolitan areas have steadily been decreasing (Nikkei, 2016b).

### 7.3.2 Continuously Increased Stress of TMG on Metropolitan City Centre

TMG has increasingly stressed the metropolitan city centre under the global competitiveness agenda. In some sense, the destiny of Tokyo's suburban territory has been substantially dependent on the policy and planning directions of TMG, as well as the leadership of governors (Sasaki, 2011). However, governors have tended to place emphasis on the urban territory. In this respect, the former public official of TMG commented:

“Governor Mr. Ishihara (during 1999 to 2011), who had a strong interest in the strengthening of global competitiveness, paid much attention to the Special Ward Area and Okutama Area (peri-suburban area) without any interests in the suburban territory located in-between them.<sup>4</sup> He exemplified the Special Ward Area (with agglomerated command-and-control functions) as ‘Washington D.C.’ and Okutama Area (with enriched natural resources) as ‘Appalachian Mountains’. The only thing in which Mr. Ishihara was interested is the opening of the Yokota US Air Base for private-sector use (to enable the operation of LCCs into overseas areas for the strengthening of global competitiveness).” (Interview No. 21)

Suburban municipalities have tended to care about the thoughts and actions of governors towards Tokyo's suburban territory.<sup>5</sup> During governor's election campaigns, they have tended to support governor candidates who stress Tokyo's suburban territory. For example, suburban mayors mutually agreed to support the election campaign of former governor Mr. Masuzoe (during 2014 to 2016) who initially expressed his strong interest in Tokyo's suburban territory.<sup>6</sup> Because governor candidates regard Tokyo's suburban territory as an important source of votes, most of them tend to suggest its importance in their future metropolitan affairs during election campaigns.<sup>7</sup> However, suburban municipalities have often felt betrayed after the campaigns. For example, Mr. Kimura, a prefectural-level politician elected from Tokyo's suburban territory, criticised Mr. Masuzoe at the Tokyo Metropolitan Assembly on 8 June 2016, as follows:

“During your election campaign, you manifested a slogan of ‘without revitalisation of the Tama Area, no growth of Tokyo Metropolis’. Soon after you were elected as governor, you newly set up deputy governor in charge of the Tama Area, and you directly visited the Tama Area. Therefore, we expected you as governor who would seriously care about our issues and problems. However, after a while, you went away from the Tama Area...When you were criticised about your frequent visits to your second house located in Yugawara Town belonging to Kanagawa Prefecture, you defended yourself by suggesting that it is closer than Okutama Town belonging to Tokyo Metropolis. Our residents feel extremely sorrowful and angry about your comment.”

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<sup>4</sup> According to an informal talk, outer suburban municipalities have felt that peri-suburban municipalities have more benefited from GOJ and TMG because of more subsidies.

<sup>5</sup> Suburban municipalities have tended to support ruling, conservative political parties, since they recognise the necessity of political powers to bring out favourable outcomes (Interview No. 1).

<sup>6</sup> The long-term vision for Tokyo, which was announced in 2015 under former governor Mr. Masuzoe, set up five goals. The fifth goal specifically mentions the locational name of the Tama Area. The public official of TMG commented that this indicates TMG's clear intention to regard Tokyo's suburban territory as an important place for Tokyo Metropolis (Interview No. 1). Yet, from the suburban side, the former public official of TMG commented that suburban municipalities collaboratively asked TMG to do this (Interview No. 21).

<sup>7</sup> In the most recent election campaign in 2016, all governor candidates made their speeches in Tokyo's suburban territory at the early stage.

As such, Tokyo's suburban territory has continued to suffer the prioritisation of governors on the metropolitan city centre. This situation would be worsened in the future under the increased stress of GOJ on provincial areas. As one evidence, current governor Ms. Koike (during 2016 to present) recently expressed her strong opposition to the aforementioned MEXT's announcement to restrict the capacity increase of private universities within Tokyo's urban territory (Nikkei, 2017d). As explained in Chapter 5, there existed the confrontation between GOJ and TMG about capital relocation in the 1990s, as observed in the concept of 'Ringed Megalopolis'. However, the recent situation would be different from that time. The previous debate of capital relocation stemmed from the side of metropolitan areas, namely the uni-polarisation of Tokyo Metropolis, but the recent shift of GOJ stems from the side of provincial areas. In the 1990s, provincial areas were still growing to create few pressures on GOJ. Now, continuous provincial devastation would magnify pressures on GOJ. Thus, TMG would be forced to more eagerly emphasise the metropolitan city centre. Consequently, Tokyo's suburban territory, which is located in-between the metropolitan city centre and provincial areas, has increasingly fallen into a dilemma (Interviews No. 2 & 21).

### **7.3.3 Retreat of Large-scale Enterprises as Global Economic Actors**

Large-scale global enterprises have also begun to retreat from Tokyo's suburban territory through the locational restructuring of their existing suburban capital and/or locational choices of new investments. Increased suburban uncertainty, or foreseeable suburban tragedy, which has been partly triggered by the retreat of upper-level government entities, has accelerated their retreats. Private-sector entities with greater mobile capabilities have taken swifter motions than public-sector entities, resulting in the delayed actions of municipal governments. Recently, some transnational enterprises have come to pay more attention to international markets under the declining domestic market. In this regard, one general manager of one of the three largest real estate companies in Japan commented:

"Private developers have greatly benefitted through urban renewal projects within the metropolitan city centre since the early 2000s. However, office floor spaces have already been oversupplied, so there exists little new development potential. Whilst GOJ has attempted to attract foreign enterprises under the slogan of the strengthening of global competitiveness, it seems difficult to do so, when looking at real outcomes after the advent of this slogan.<sup>8</sup> Recently, foreign companies have chosen to reside in other major cities in the East Asia region such as Beijing, not in Tokyo, due to geopolitical reasons. Because Tokyo is located at the eastern edge of this region, foreign companies residing in Tokyo are likely to be only those who target the domestic market of Japan...Moreover, the recent GOJ's action for the promotion of home-based teleworking might change the workstyles of office workers, resulting in less office floor demands. We pay attention to this action with a sense of fear...After

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<sup>8</sup> The general manager also commented the following: "while area branding is important to attract foreigners, the area name of 'Marunochi', which indicates the most famous business district for the Japanese, is not well known for foreigners. The government sector should strengthen appealing activities" (Interview No. 19).

the Tokyo Olympics 2020, the investments of our company will go towards overseas markets such as the US and UK. Moreover, if taking risks, we will make investments in growing East Asian countries, such as China. Although GOJ has tried to revitalise provincial areas, there are little business opportunities for us.” (Interview No. 19)

Surplus profits gained through urban renewal projects within the metropolitan city centre have tended not to be re-invested into Tokyo’s suburban territory, as well as provincial areas. Large-scale enterprises have steadily been increasing their investments into overseas markets (Nikkei, 2016d). In this situation, while TMG has designated Tokyo’s suburban territory as a home of incubation and entrepreneurship, the general manager continued:

“New office developments are unlikely to take place in the Tama Area due to less profitability, whilst commercial, residential and logistic developments are thinkable. Now, TMG has tried to develop the Tama Area as a home of incubation and entrepreneurship. Whilst incubation and entrepreneurship will create office demands, existing small office buildings in the Tama Area are sufficient to accommodate these demands if they would be renovated as needed. Even in the metropolitan city centre, office rent businesses for start-ups are not profitable. Therefore, this policy direction of TMG does not motivate us to develop intelligent office buildings in the Tama Area.” (Interview No. 19)

Besides, manufacturing companies have gradually retreated from Tokyo’s suburban territory. Their locational restructuring has taken place in an inward direction, namely outer suburban-to-inner suburban areas, while some companies who seek for cheaper, larger lands and lower-wage labours have out-migrated into neighbouring provincial areas in an outward direction. The examples include the consolidation of global electronic company’s R&D activities in Ome City into those in Fuchu City (in the inner suburban territory) (Interview No. 34), and personnel reduction of technicians and researchers that previously worked at R&D facilities in Hachioji City (Interview No. 37). Tokyo’s suburban territory has currently confronted a new stage of industrial restructuring. That is, most production plants had already been relocated into NICs (Interview No. 37). Now, R&D activities, especially those of large-scale electronic and/or machinery companies that have gradually lost international competitiveness, have entered restructuring processes, resulting in new self-organising responses of local SMEs and new business entrepreneurship movements (Interviews No. 34 & 37).

Moreover, university campuses, especially their social science-related departments, have gradually begun to relocate into the urban territory for better opportunities to attract new entrants under increasingly severe inter-university competition. This sort of relocation has been promoted by the 2002 abolishment of the Law concerning Restriction on Factories in Existing Urbanised Areas of the Metropolitan Region of 1959. Simultaneously, private universities have felt a sense of crisis against the year 2018 problem, in which the number of potential students is anticipated to dramatically decline. For example, Chuo University has announced the relocation of the Faculty of Law from the Tama Campus in Hachioji City to the Ichigaya Campus in Shinjuku Ward (Nikkei, 2015). Other universities within Tokyo’s suburban territory have activated this kind of relocation. The decreased number of university students has damaged the suburban

local economy, especially on the consumption side. Simultaneously, whilst Tokyo's suburban territory can still collaborate with natural science-related departments that need larger spaces for their activities such as experiments (Interview No. 6), universities' out-migration would reduce the opportunities of industrial-academic-government cooperation.

In addition, there are other various examples of private-sector retreats. JR East has announced their intention to reduce frequencies of train operation between Ome City and Tachikawa City (Interview No. 42).<sup>9</sup> The Tokyo Tomin Bank has gone back into Tokyo's urban territory with the closure of some suburban branches (Interview No. 37). Foreign investors have also dismissed Tokyo's suburban territory (Interview No. 12), under the trend that their investments increasingly take a form of portfolio investments rather than that of direct investments.<sup>10</sup> For instance, Aveline-Dubach (2014b)'s work about the spatial distribution of the residential portfolios of J-REITs shows that there exist little portfolios within Tokyo's suburban territory. In these ways, the outflows of private-sector capital from Tokyo's suburban territory have been faster than ever before.

#### **7.4 New Suburban Struggles under Retreat of Greater Mobile Actors**

The recent divergence of greater mobile actors has forced municipal governments and other local actors to tackle suburban shrinkage alone. Tokyo's suburban territory has long struggled with the policy and planning concept of 'suburban self-containment'.<sup>11</sup> The term of 'suburban self-containment', or 'self-sustained city-regions', is an intriguing expression that has become internationally common in the planning field. The recent documents of both GOJ and TMG have continually recycled this term, whilst its definition has not been concretely defined beyond the proximity between residence and workplace. However, this concept of 'suburban self-containment' has failed to strongly direct the planning and development of Tokyo's suburban territory, as the former public official of TMG commented:

"The most critical problem for the Tama Area is that there have not so far existed clear visions after the First NCRDP of 1958 that pursued the greenbelts in the inner suburban territory and industrial satellite cities in the outer suburban territory. This first plan could successfully set a clear vision for the Tama Area. Upper-level governmental entities developed large-scale industrial parks, including that in Ome City that best benefitted from the first plan in my view. However, all subsequent plans that used

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<sup>9</sup> JR East has come to strictly make management decisions after the privatisation of Japanese National Railways in 1987 (Interview No. 42). This decision to reduce the frequencies of train operation was made, notwithstanding that mayors belonging to the Nishi-Tama Network have historically visited together a branch manager of JR East to ask for better railway operations (Interview No. 42). According to informal talks, it is difficult for municipal governments to persuade JR East, when compared to local bus companies with which municipal governments have provided subsidies.

<sup>10</sup> One manager of CRBE, Inc. pointed out amenities as one criterion for the locational choices of investments (Interview No. 12). However, one emeritus professor commented the following: "within the metropolitan city centre, there existed large-scale houses with beautiful gardens during the Edo era (1603-1868), which were owned by feudal lords. Now, these sites were developed as gardens open to the public. Therefore, Tokyo's urban territory has larger amenity spaces, compared with the suburban territory" (Interview No. 6). The lack of amenities within Tokyo's suburban territory, except for peri-suburban areas, stems from Tokyo's historicity.

<sup>11</sup> Some scholars point out similar things. For instance, see Miyake (2005a) and Eto (1995).



conceptual, ambiguous terms, such as 'suburban self-containment', 'self-sustained city-regions' and the BCCs, could not provide any clear visions for the Tama Area. For example, a concrete image of the BCCs has been absent. I think that everyone, including government officials, does not understand what the BCCs really are and how they can be realised. Whilst there are various business functions, government officials have been incompetent to identify what kinds of business functions are required to form the BCCs." (Interview No. 39)

This situation has been increasingly worsened under the recent divergence of greater mobile actors. The positioning of Tokyo's suburban territory within the wider context has increasingly become ambiguous.<sup>12</sup> In this regard, the public official of Tachikawa City Government commented:

"The Tama Area has faced the increased ambiguity within the wider context. GOJ and TMG have focused on the Special Ward Area. More recently, GOJ has become eager to revitalise provincial areas. Thus, little attention has been increasingly paid to the Tama Area positioned in-between these areas. Now, there are no clear visions for the Tama Area, while being important. This increased ambiguity has made it more difficult to set up clear visions that can be shared among suburban municipalities." (Interview No. 2)

This ambiguity has brought out the difficulty of suburban governance and management, especially for collaborations among different tiers of government and among municipal governments. Moreover, this situation has created the specific attitudes and thoughts of municipal governments, as the former public official of TMG commented:

"Due to the recent shift towards the revitalisation of provincial areas, municipal governments in the Tama Area have been increasingly puzzled to become unable to clearly express their thoughts and attitudes. Since they recognise that they cannot survive without reliance on the Special Ward Area, they cannot obviously suggest that they are part of provincial areas to be prioritised by GOJ. Therefore, they have been forced to alter their thoughts and attitudes like chameleons, depending on different political and policy agendas." (Interview No. 21)

These attitudes and thoughts of municipal governments would be specific to Tokyo's suburban territory with the political and geographical proximity to the metropolitan city centre; this tendency would be more strongly observed in the outer suburban territory. This would make it more difficult to promote suburban planning and development in a consistent way and hinder proactive policy making and implementation in a timely manner.

Moreover, it is problematic that in Tokyo Metropolis, the delayed decentralisation of powers and responsibilities has been coincident with the back-to-the-city movement in the overall context of stagnation and/or decline. While decentralisation has become common worldwide, municipal governments in Tokyo's suburban territory have not necessarily appreciated it (Interview No.

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<sup>12</sup> Sieverts (2003: 3-6) notes that in-between spaces are "a field of living which, depending on one's interest and perspective, can be interpreted either as city or as country...These characteristics link the area of Greater Tokyo with the Ruhr area". This in-betweenness has increasingly been magnified within Tokyo's suburban territory.

21).<sup>13</sup> Due to the delayed decentralisation and rapid transition from suburbanisation to re-urbanisation, municipal governments have failed to alter their attitudes and thoughts formed during suburban growth, foster tangible and/or intangible resources, and adapt their local governance systems to the new conditions of suburban shrinkage (Interviews No. 4, 21 & 41).<sup>14</sup> For example, the former public official of TMG commented:

“In the remote past, municipal governments in the Tama Area did not receive much subsidies from upper-level governmental entities to ensure their spontaneous actions of expressing interests and concerns. However, nowadays, they have got used to receiving subsidies. Whilst decentralisation has been promoted, municipal governments have still been inclined to follow the intentions of upper-level governmental entities, partly for subsidies. I think that suburban municipalities should open their future pathways with use of their own wisdoms and capabilities (rather than relying on upper-level governmental entities).” (Interview No. 39)

Their attitudes and thoughts fostered during suburban growth have still influenced current municipal-level public affairs. Besides, suburban governance and management, especially those of traditional cities, are strongly influenced by the elderly who still have the fixed way of thinking formed during suburban growth (Interview No. 41). In this situation, municipal governments cannot make the most use of decentralised powers and responsibilities due to the lack of technical skills and relevant human resources. For example, in the case of private-sector development projects, municipal governments have struggled to negotiate with private developers, as the former public official of TMG commented:

“All municipal governments in the Tama Area do not welcome decentralisation. While only autonomy-minded, large municipal governments welcome it, the other small municipal governments are puzzled by it. One reason is the lack of human resources. These municipal governments do not possess experienced, skilled professionals, such as those who can make better negotiations with private developers. In the past, there was a clear division of roles and responsibilities in urban planning, namely city planning-related matters for TMG and district (or local) planning-related matters for municipal governments. In some sense, municipal governments could benefit from this division. They could ask private developers to communicate with TMG, suggesting that part of their development proposals should be consulted with TMG. Through negotiation processes at both metropolitan and municipal levels, their development proposals finally became to be aligned with the intentions of the public sector. However, municipal governments, which are now powered for both city and district (or local) planning-related matters, cannot sufficiently exploit public benefits through negotiations with private developers who often employ the retired public officials of TMG with much relevant experiences.” (Interview No. 21)

Not only from the viewpoint of the relationship with upper-level governmental entities, but also from that with local communities, municipal governments have been burdened by increasingly emphasised democratic planning and community participation. Municipal governments have

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<sup>13</sup> Decentralisation is not always suitable for everywhere at every time; even within each nation, each city-region with specific political and geographical settings is likely to have varied policy and planning agendas at different phases of urbanisation. In this regard, Tomaney (2016: 546) notes that “self-reliance can be a source of weakness for cities as well as strength”.

<sup>14</sup> According to an informal talk, Nishitokyo City has been struggling with the lack of skilled professionals for building permission-related activities, while these activities would be decentralised from TMG.

been forced to face differentiated local contexts and community voices, which have been shaped over a long time through repeated administrative annexes (Interview No. 5). Specifically, there exist great differences in local voices between newcomer and traditional communities (Interviews No. 20, 33 & 36). These differentiated voices have hindered the swifter actions of municipal governments, such as those for the restructuring of public infrastructures and buildings (Interviews No. 20 & 30). These contextual differentials anchored in the remote past have still impacted current municipal-level public administration. Consequently, municipal governments have been increasingly caught in a dilemma between upper-level governmental entities and local communities.

## **7.5 New Inter-sectoral Policy Shift: Different Causal Relationships by Policy Domain for Retreat from Tokyo's Suburban Territory**

### **7.5.1 From the Policy Perspective of Urban and Infrastructure (Re)development**

As for the policy domain of urban and infrastructure (re)development, Tokyo's suburban territory, which has already been extensively furnished with economic and social infrastructures, has diminished upper-level governmental entities' involvements. During suburban growth, this policy domain had taken the lead role in suburban planning and development at all tiers of government. Upper-level governmental entities had strongly been involved in suburban infrastructure development, especially within the outer suburban territory where industrial satellite cities were planned under the First NCRDP of 1958. Therefore, the outer suburban territory has possessed a better quality of economic infrastructures, compared with the inner suburban territory (Interview No. 11). Especially for TMG, economic infrastructures, including the Tama Monorail, have been developed to solve disparities between Tokyo's urban and suburban territories (Interview No. 1). In fact, most major roads had been developed by TMG rather than GOJ (Interview No. 39).<sup>15</sup> Notably, the urban and infrastructure administrative sections of TMG have possessed more wider perspectives and scopes for suburban planning and development, compared with the administrative sections of the other two policy domains (Interview No. 39). In fact, within TMG, there is a specific administrative section in charge of Tokyo's suburban territory only within the policy domain of urban and infrastructure (re)development. In line with upper-level governmental entities' involvements, municipal governments had developed local-wide infrastructures, such as elementary schools and sewage systems. However, this infrastructure development had been conducted without much coordination with the other two policy domains, except for agricultural issues, as the former public official of TMG commented:

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<sup>15</sup> The former public official of TMG commented the following; "we could not ensure road width to a sufficient extent, while concentrating the extension of road length which was an evaluation indicator for road development in the public sector" (Interview No. 21).

“In TMG of my time, there had not existed close cooperation between the administrative sections of ‘urban planning’ and ‘industrial development’. By contrast, close coordination existed between the administrative sections of ‘urban planning’ and ‘agricultural promotion’, often involving strong conflicts between new development and agricultural preservation. Ideally, there should be close relationships between ‘urban planning’ and ‘industrial development’. However, Japan has been lacking human resources who are familiar with both of them due to governmental sectionalism and university education system.” (Interview No. 39)

During suburban growth, infrastructure development had inevitably brought economic and social prosperities for Tokyo's suburban territory, even without much linkages to the policies and strategies for industrial and commercial promotion. Yet, some infrastructure development projects planned during suburban growth have been derailed (Interview No. 11). For one example, most parts of the original plan of the Tama Monorail have been not implemented. For another example, the development of ring roads, such as the 2nd Tokyo Outer Loop Road aimed to connect the BCCs, has been delayed, compared with that of radial roads (Interview No. 11).<sup>16</sup> Consequently, to some extent, suburban economic infrastructures have still been functionally fragmented as a whole system. Therefore, TMG has still stressed the development of the unrealised parts of economic infrastructures (TMG, 2009b, 2013, 2014b).<sup>17</sup> However, it seems that most of them would be too difficult, or unfeasible, to be implemented under suburban shrinkage.<sup>18</sup>

Nowadays, new large-scale developments can hardly be found within Tokyo's suburban territory, except the recently opened Metropolitan Inter-city Expressway (MIE) (the outermost ring road of the Greater Tokyo Area) and Linear Motor Car (a magnetically levitated train to be developed between Tokyo and Osaka through Nagoya) (for their locations, see Figure 7-2). Under the situation that GOJ has considered a lack of ring roads as one of the main obstacles for ‘suburban self-containment’ (MLIT, 2011), upper-level governmental entities have made continuous efforts to implement the MIE. Yet, the MIE has brought together both desirable and undesirable impacts on Tokyo's suburban territory (Tama Shinkin Bank, 2010). As for desirable outcomes, industrial area development along the MIE, such as the developments of logistics

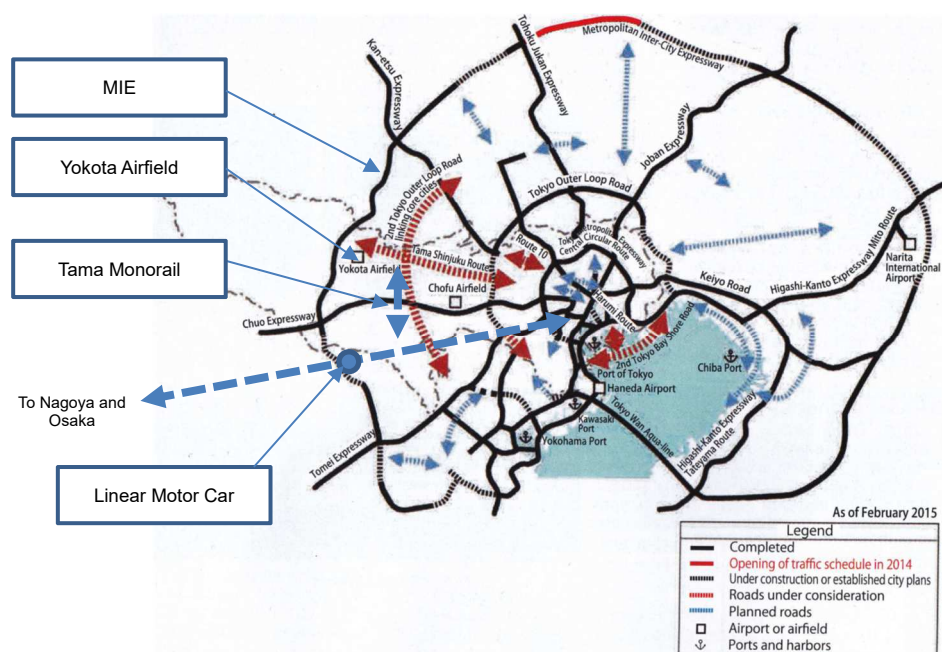
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<sup>16</sup> For some information, see Bureau of Urban Development, TMG. ed. (2015).

<sup>17</sup> The new vision for Tokyo's suburban territory, which was announced by TMG in 2013, includes the following policy directions: a) the improvement of transport infrastructures, b) the development of low-carbon, self-sufficiency energy systems, and c) industrial revitalisation with use of local resources (TMG, 2013). It can be considered that the importance of suburban economic development has been increasingly recognised in this new vision, whilst supportive institutional systems can be considered relatively weak. As for a), the development of the 2nd Tokyo Outer Loop Road has still been pursued. As for b), the former public official of TMG has attempted to promote geothermal energy businesses with use of abundant underground water resources as one of the comparative advantages of Tokyo's suburban territory (Interview No. 21). As for c), the public official of Tachikawa City Government commented that recent increases in agricultural production have been brought out by increased added values through local branding, rather than increased actual volumes (Interview No. 2). Moreover, the public official of Ome City Government commented that Ome City has attempted to promote tourism activities with advantage of agricultural and forestry resources (Interview No. 31). In these ways, suburban municipalities have been trying to make the maximum use of local resources.

<sup>18</sup> According to the person trip survey in 2008, principal means of transportation are as follows: as for Tokyo's urban territory, 48 percent for railways and 11 percent for automobiles, and as for Tokyo's suburban territory, 27 percent for railways and 26 percent for automobiles (Interview No. 11). Therefore, the suburban territory would still have more demands for road development, compared with the urban territory.

and warehouse facilities in Hachioji City and Ome City, has been stimulated (Interview No. 37). However, the MIE might also have triggered the out-migration of some economic actors, partly due to improved transport accessibility. The out-migration of production lines of Hino Motors, Ltd. from Hino City (in the outer suburban territory) might be considered as one undesirable outcome.<sup>19</sup> Notably, Tokyo's suburban territory has a specific geographical feature of being positioned in-between the urban territory and vast hinterlands of the National Capital Region. In this sense, Tokyo's suburban territory is different from most suburban territories of large European cities, each of which does not have vast hinterlands and is spatially separated from the second closest city. Tokyo's suburban territory is just part of the National Capital Region with vast, contiguous urbanised areas. Whilst the relocation of production lines of Hino Motors, Ltd. seems to be triggered by the need for functional restructuring and consolidation, some global economic actors would choose to relocate into the hinterlands with advantage of improved transport accessibility by the MIE, as well as due to little suitable industrial lands within Tokyo's suburban territory.



Source: Adapted from Bureau of Urban Development, TMG (ed.) (2015)

Figure 7-2 Locations of MIE, Linear Motor Car and Yokota Airfield

As another example of infrastructure development, a station of Linear Motor Car will be constructed near Hachioji City (Interview No. 11) (for its location, see Figure 7-3).<sup>20</sup> However, even if being constructed, this station might make limited contributions to the suburban

<sup>19</sup> According to Nikkei (2011, 2013), Hino Motors, Ltd. announced the future relocation of car production lines from Hino City into Furukawa City in Ibaragi Prefecture within provincial areas, re-deploying approximately 2,300 employees. There is a possibility for Hino Motors, Ltd. to promote subcontracting with local SMEs in Furukawa City with consideration of transport costs (Nikkei, 2011, 2013).

<sup>20</sup> The stations of Linear Motor Car will be developed under the concept of 'one prefecture, one station', so the station nearest to Tokyo's suburban territory will be developed in Kanagawa Prefecture (Interview No. 11).

economy due to less origins and destinations of passengers within Tokyo's suburban territory. Here, importantly, TMG has tried to make the Yokota Airfield open to the private sector (Interview No. 11). This airfield, which is used by both the US and Japan, is located mainly in Fussa City (in the outer suburban territory). As mentioned above, former governor Mr. Ishihara (during 1999 to 2011) showed his strong interest in this opening for the strengthening of global competitiveness (Interview No. 21).<sup>21</sup> This opening itself can be actualised by utilising existing infrastructures without much public investments. It has great potential of accelerating suburban economic revitalisation and strengthening global connections, creating new types of inbound and outbound flows of goods, services, people and information through Tokyo's suburban territory (Shiomi and Oguma, 2016). Besides, it has a possibility of creating demands to justify new developments for the unrealised parts of previously planned infrastructures, possibly leading to the more integrated functioning of existing and new economic infrastructures, especially those among the Yokota Airfield, Tama Monorail, and Linear Motor Car. However, there are some political obstacles for this opening. This is a bilateral matter of concerns, in which the US government has required national-level negotiations with GOJ. Yet, GOJ has struggled with more nation-wide issues concerned with other US army bases, such as those in Okinawa Prefecture, resulting in less prioritisation on the Yokota Airfield. Besides, some local residents, especially the elderly who do not like to radically alter their daily lives, have been opposed to this opening, because of the possibility of worsening living environments by generated noises and air pollutions (Interview No. 24). In this sense, suburban aging itself has impeded drastic suburban changes.

While some public-sector infrastructure projects have undergone, Tokyo's suburban territory has already shifted from infrastructure development centred on public investment to urban redevelopment centred on private investment. In this situation, the surrounding areas of suburban railway stations have still possessed (re)development potential for the private sector, especially for residential development. It is partly because this potential is more strongly proportional to distances from the nearest railway stations rather than distances from the metropolitan city centre (Interviews No. 6 & 16).<sup>22</sup> However, currently, these nearby-station areas within Tokyo's suburban territory have been dominated by residential and commercial development projects in which private developers have sought for faster and safer returns. Consequently, while Tokyo's suburban territory would need to induce functions that can create new values through these nearby-station projects, it has failed to do so.<sup>23</sup>

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<sup>21</sup> TMG (2013, 2014a) still mentions the importance of this opening of the Yokota Airfield. However, recent governors have not been so proactive in this matter, compared with former governor Mr. Ishihara (Interview No. 11).

<sup>22</sup> One professor commented that the investments of railway companies at the early stage of the back-to-the-city movement are important to accommodate migrating people and achieve area revitalisation alongside railway lines, as evidenced by the case of the Tokyu Toyoko Line by Tokyu Corporation (Interview No. 16).

<sup>23</sup> Childcare facilities have tended to be installed into station buildings to enable female workers to entrust their children on the way of their commutes. However, the public official of Tachikawa City Government commented the following: "most female workers who use childcare facilities in Tachikawa City are part-time workers whose workplaces are located near their homes. Even if childcare facilities would be developed near stations, females working within the metropolitan city centre cannot come back to Tachikawa City before their closing times" (Interview No. 25).

In this situation, it is important to make the maximum use of high development potential in nearby-station areas, taking advantage of the railway network as one significant suburban stock. This is especially relevant under the period of suburban shrinkage in which new infrastructure development is difficult. The role of the railway network is to ensure high transport accessibility to the metropolitan city centre and determine the spatial distribution of development potential, resulting in the creation of high potential in nearby-station areas geographically far from the metropolitan city centre. Simultaneously, owing to the railway network, nearby-station areas have higher land prices which can attract property investments through securitised real estate. However, as for the development of nearby-station areas, suburban municipalities have failed to make better collaborations with railway companies for industrial development and job creation.

In this regard, the recent attitudes and actions of railway corporations have been associated with area revitalisation alongside railway lines; the extent of area revitalisation has been varied depending on different railway lines, partly due to the differentiated extent of railway companies' involvements (Interview No. 16). During suburban growth, JR East played a key role in industrial development within Tokyo's suburban territory by extending branch lines from the JR Chuo Line into industrial areas (Interview No. 39). By contrast, private-sector railway corporations devoted themselves to residential development, rather than industrial development, to increase suburban-to-urban commuters. Entering the period of suburban shrinkage, JR East has gradually retreated from Tokyo's suburban territory, as mentioned above. Yet, some private-sector railway corporations have become proactive in area revitalisation (Interview No. 16). For instance, Tokyu Corporation recently started the business of share offices (Nikkei, 2016c) in the situation that enterprises have increasingly become positive about satellite offices (Nikkei, 2017c). Private-sector railway corporations would have no choice to make the most use of their limited number of railway lines, so it would be possible to make them more proactive for area revitalisation if providing better incentives. However, currently, most private-sector railway corporations within Tokyo's suburban territory seem to be less proactive, when compared to Tokyu Corporation. It would be partly due to the lack of negotiation powers of municipal governments, which have not accumulated relevant professionals owing to the delayed decentralisation (Interview No. 21). Reflecting the recent action of Tokyu Corporation for satellite offices, suburban municipalities need to make better collaboration with railway companies for the creation of high-order service employment. Yet, it would be difficult to achieve this sort of collaboration (especially with JR East) only by the efforts of municipal governments and other local actors. Therefore, rather than pursuing new infrastructure development, it is important to establish integrated collaboration systems among public, private and community sectors (including upper-level governmental entities) for industrial and commercial promotion in the form of making the most use of existing infrastructures, especially the railway network.

Overall, the time period, in which urban and infrastructure (re)development had inevitably brought economic and social prosperities, has already passed for Tokyo's suburban territory. Simultaneously, upper-level governmental entities have retreated from Tokyo's suburban territory due to less opportunities for infrastructure development. Nevertheless, suburban capital accumulated during suburban growth has become burdensome on municipal governments and local communities. For instance, municipal governments have suffered the operation, maintenance and renewal costs of decrepit infrastructures (Interviews No. 24 & 30). Moreover, large-scale housing complexes that were massively developed by the public sector during suburban growth have become symbolic entities of the aging society (Interview No. 17). Consequently, infrastructure management-related burdens have been increasing on municipal governments that have coincidentally suffered social welfare-related burdens.

### **7.5.2 From the Policy Perspective of Social Welfare Improvement**

As for the policy domain of social welfare improvement, the retreat of upper-level governmental entities has been driven by the necessity to reduce their social welfare expenditures, which have rapidly increased at all tiers of government. In fact, the annual budget of GOJ has continued to rise inexorably for social welfare (W. Suzuki, 2010). In this situation, GOJ has recently become eager to promote an in-home nursing care system, called the Integrated Community Care System (ICCS), under a catchphrase that more localised systems are necessary for better-quality social welfare services. However, this system is in essence nothing less than a neglect of the elderly (Interview No. 26). Simultaneously, TMG has recently restructured metropolitan hospitals within Tokyo's suburban territory for the optimisation of their hospitals under the Office of Metropolitan Hospital Management. In these regards, the public official of Tachikawa City Government commented:

“GOJ has recently promoted the ICCS. This policy aims to reduce social welfare expenditure by promoting a shift from hospitalisation to in-home care. It implicitly asks the elderly to close their lives at home without relying on medical care services of the public sector. Moreover, TMG has tried to restructure regional-wide metropolitan hospitals, resulting in the downgrade of medical care services in the Tama Area. One metropolitan hospital in Hachioji City was closed in the form of being consolidated into a new metropolitan hospital in Kokubunji City (in the inner suburban territory). Consequently, one pregnant woman unfortunately died, due to a long time of being carried into hospital. Obviously, there is a disparity in medical care services between the Tama Area and Special Ward Area. For example, the number of beds for the Neonatal Intensive Care Unit is much fewer in the Tama Area with 63 beds, compared with the Special Ward Area with 237 beds. In addition, the ratio of obstetricians and gynecologists to the population is 8.2 for the Tama Area, but 15.8 for the Special Ward Area.” (Interview No. 26)

Moreover, the process of medical care planning by TMG itself has showed their less prioritisation on Tokyo's suburban territory, as the public official of Ome City Government in charge of the Ome Municipal General Hospital comments:



“For the recent restructuring of metropolitan hospitals, TMG seems to consider metropolitan hospitals in the same way as metropolitan museums. The fact of owning some hospitals itself is meaningful to them. For the provision of medical care services, TMG has envisioned a functional differentiation in spatial terms, namely acute diseases for the Special Ward Area and chronic diseases for the Tama Area. This functional sharing is unbalanced, resulting in that only the Special Ward Area would provide most advanced medical services. When planning for medical care services, TMG deals with the Tama Area as only one zone without any divisions into sub-zones, whilst the Special Ward Area is divided into several sub-zones to ensure the better provision of medical care services. The way of setting (sub)zones itself shows TMG’s less prioritisation on the Tama Area.” (Interview No. 35)

Whilst GOJ has stressed better human well-beings by shifting from quantitative expansion to qualitative improvement, the retreat of GOJ and TMG has increasingly downgraded the quality of social welfare environments in Tokyo’s suburban territory (Interview No. 26). Now, the elderly with less physical mobility have been increasingly isolated, often being far from the centre of each city without much transport accessibilities (Interview No. 22). Nevertheless, municipal governments and local communities have been increasingly left to work alone for social welfare improvement. Moreover, the recent actions of upper-level governmental entities, especially the ICCS, have increasingly forced municipal governments to narrow their perspectives and scopes mainly on local issues related to social welfare.

### **7.5.3 From the Policy Perspective of Industrial and Commercial Promotion**

As for the policy domain of industrial and commercial promotion, it can be considered that all tiers of government had, or has, not been proactive for Tokyo’s suburban territory, compared with the other two policy domains. Comparatively, from an overall historical perspective, Tokyo’s suburban territory had, or has, been a vacuum of public intervention in this policy domain. This is especially applied to collaboration with global economic actors. This non-proactiveness is related to the specific political and geographical positioning of Tokyo’s suburban territory, as well as the spatial distribution of industries within the metropolitan fabrics.

From the viewpoint of private-sector locational choice behaviours, large-scale enterprises have spontaneously concentrated into the metropolitan city centre through market mechanisms (Interview No. 42). They have been attracted by the magnetism of the capital city under the Japanese political and administrative system of a development state. Therefore, during suburban growth, Tokyo’s suburban territory with the intermediate proximity to the metropolitan city centre had, without much public intervention, attracted various industries such as production plants and R&D facilities of large-scale companies, university campuses, and some high-order service industries (Interviews No. 28 & 34). Besides, the Law concerning Restriction on Factories in Existing Urbanised Areas of the Metropolitan Region of 1959 (now, abolished in 2002) had served to push out these industries from Tokyo’s urban territory into the suburban

territory. In this process, pre-existing local SMEs, including those in textile and military industries accumulated even before the WWII, had successfully supported these production plants and R&D facilities, since local SMEs' physical and/or non-physical capital, such as facilities, equipment and human skills, were flexible and adaptable enough to make close linkages with them (Interviews No. 8 & 34).

From the viewpoint of public intervention, GOJ has historically cared about large-scale enterprises mostly agglomerated within the metropolitan city centre. Then, TMG has cared about local SMEs mostly agglomerated within Tokyo's urban territory, resulting in less prioritisation on the suburban territory (Interview No. 39). Whilst TMG has established the Tokyo Metropolitan SME Support Centre since 1966, most of their branches have resided in Tokyo's urban territory; among 13 branches except for its headquarter, 12 branches reside in the urban territory, and only 1 branch resides in the suburban territory, as of 2017. This spatial distribution itself would express TMG's less prioritisation on Tokyo's suburban territory. While TMG (2013, 2014a) emphasises the recent opening of the Industrial Support Square Tama, it does not much stress collaborations with the TAMA Association. Moreover, the Bureau of Industrial and Labour Affairs of TMG has been deficient of human resources capable for economic development, because it originally stemmed from the public-sector role of the surveillance on labour management and administration in private-sector entities (Interview No. 21). Public officials of Ome City Government expressed their views about TMG in the field of industrial and commercial promotion, as follows:

"Neighbouring Saitama Prefectural Government has proactively engaged in industrial attraction along the MIE. However, TMG has not been proactive in this sort of industrial attraction...Historically, TMG has been not proactive for economic and industrial development especially within the Tama Area, since the metropolitan city centre has attracted private enterprises without much efforts of TMG. I think that economic and industrial development has traditionally been in the policy sphere of GOJ, but I do not know much about the TAMA Association (related to the industrial cluster project begun by METI)." (Interview No. 42)

Given these conditions of upper-level governmental entities, municipal governments have mainly cared about local SMEs rather than large-scale enterprises (Interviews No. 28 & 31). Simultaneously, due to the past economic growth achieved by the initiative of GOJ, municipal governments might still consider that economic and industrial development would be taken charge of by GOJ. These have resulted in the less proactiveness of municipal governments in communicating, networking and partnering with global economic actors, whilst they now feel the necessity to establish close relationships with global economic actors (Interview No. 28). In the situation that local CCIs tend to struggle to provide coherent supports when the size of targeted companies widely varies (Interview No. 34), local CCIs have also paid much attention to local SMEs rather than large-scale enterprises. Consequently, municipal governments and local CCIs have been less capable of preventing the out-migration of large-scale production plants and/or R&D facilities. Consequently, the policy domain of industrial and commercial promotion in close

collaboration with large-scale enterprises had, or has, been a vacuum of public intervention within Tokyo's suburban territory. Thus, compared with the other two policy domains, this policy domain had, or has, institutionally become thin, when referring to Amin and Thrift (1994: 14)'s "institutional thickness".

More closely from a municipal-level, inter-sectoral perspective, municipal governments have not been proactive in the policy domain of industrial and commercial promotion, compared with the other two policy domains. This is relevant not only to global economic actors, but also to local economic actors. This inactivity is evidenced by the fact that municipal governments have spent only 0.8 percent of the total expenditures for industrial and commercial promotion, which is much lower than 3.6 percent on the national average (Tama Shinkin Bank, 2010). In this regard, one general manager of the Tama Shinkin Bank commented:

"Municipal governments in the Tama Area have been not proactive in economic and industrial development, as observed in their less spending for industrial and commercial promotion, when compared to the national average. Besides, their industrial and commercial administrative sections are often considered to be within part of civil services. Local CCIs are also busy only for local matters, such as local commercial shops and local festivals...For me, all parts of the Tama Area seem to have the same colours. That is, the Tama Area has failed to make the maximum use of the local potential of each area with specific characteristics; for example, it is rare that art universities densely concentrate within part of the Tama Area (However, this concentration is not fully utilised for area revitalisation)." (Interview No. 37)

Entering the 2000s, municipal governments have begun to enact local ordinances for industrial attraction. As for some outer suburban municipalities, the years of enactment are follows: 2004 for Hachioji City, 2012 for Ome City, and 2015 for Hino City. Tachikawa City does not have a local ordinance of this sort (Interview No. 2). However, their actions about local ordinances seem too late, whilst being to some extent related to the delayed decentralisation. For these enactments, municipal governments seem to be motivated by a sense of crisis about the fact that their economic decline has become apparent. In some sense, their late actions would reveal their reactivity in industrial and commercial promotion.

Besides, some municipal governments claim the lack of large-scale industrial lands for industrial attraction (Interview No. 7). However, it is ironic that less availability of industrial lands originally stemmed from the past intentions of municipal governments about zoning designation (Interview No. 39). At the timing of the first zoning designation, TMG designated a large volume of industrial zones based upon the requests of municipal governments (Interview No. 39). However, at the timing of revising the zoning designation in the late 1960s, municipal governments asked TMG to reduce industrial zones, since they cared about industrial pollutions, such as noises, smells and air pollutions (Interview No. 39).

Of course, it is not true that upper-level governmental entities have made no actions for Tokyo's suburban territory. As explained in Chapter 5, GOJ, namely METI, began the industrial cluster

project within the TAMA (as the designated project area) in 2001. This industrial cluster project, which has been implemented by the TAMA Association, has made significant contributions to suburban economic development (Kodama, 2002, 2003, 2010a, 2010b; Okazaki, 2010; M. Sato, 2013). However, this project has now faced the retreat of GOJ. While entering the autonomous growth phase of the 2010s, the TAMA Association is required to achieve fiscal independence without much reliance on subsidies from GOJ (TAMA Association, 2013). Simultaneously, the number of association members has gradually decreased after the economic crisis of 2008, resulting in the revenue reduction of the TAMA Association. The increasingly worsened fiscal condition would hinder their future activities. In this regard, one general manager of the TAMA Association commented:

“Now, our association cannot receive constant subsidies from GOJ. Recently, the number of association members has continued to decrease even at a slow pace, resulting in our fiscal shortage. We have been trying to change the membership fee system, but this might result in further decrease in the number of members...The industrial cluster project in the Chubu metropolitan area (around Nagoya City) has still received subsidies from GOJ. It has accommodated strong automobile industries centred on super companies, such as Toyota Motor Cooperation, leading to strong political connections with the headquarter of METI located in the Kasumigaseki Area. By contrast, since the Tama Area has diversified industries without any super companies, our association has little connections with the headquarter of METI, whilst having connections with the Kanto Bureau as a regional office of METI in Saitama Prefecture...Whilst there were connections with TMG when operating projects subsidised by them, our relationship with TMG might have become weak after the completion of those projects.” (Interview No. 45)

Simultaneously, the TAMA Association has been struggling with a lack of relevant human resources, partly resulting in the difficulty of collaborations with global and local entities. In this regard, the general manager continued:

“The TAMA Association has not been well known among municipal governments. The labour forces of our association have been primarily supported by seconded public officials from some municipal governments. However, municipal governments facing their severe fiscal conditions have now become unable to second their personnel to our association. Recently, municipal governments are inclined to second their public officials to the Kanto Bureau of METI, rather than our association closer to the field, to make them learn about economic development policies.<sup>24</sup> Besides, due to the short-time shuffling of human personnel, our association has faced the difficulty of accumulating know-hows.” (Interview No. 45)

Ome City was recently approached by the TAMA Association for information collections about local SMEs residing in Ome City (Interview No. 42). Even now, integrated information sharing seems insufficient. Local CCIs have also been involved in this industrial cluster project. However, while the powers of local CCIs become stronger, functional sharing with the TAMA Association becomes more difficult (Interview No. 45). Consequently, some local SMEs do not

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<sup>24</sup> In the policy domain of industrial and commercial promotion, municipal governments seem to recently feel the importance of the policy-making phase (rather than the implementation phase) without much reliance on GOJ.

obtain sufficient satisfactions through this industrial cluster project, while recognising the significant contributions of the TAMA Association and TAMA-TLO (M. Sato, 2013).

Whilst the TAMA Association has recognised the necessity of strengthening large-scale enterprises' participations (TAMA Association, 2007), large-scale enterprises have been less involved in their activities, as the general manager continued:

"The number of large-scale companies as association members has not increased so much. While being necessary to clearly explain to large-scale enterprises about their merits when participating in our activities, this is difficult. Compared with business matchings among local SMEs, it is difficult to make connections between large-scale companies and local SMEs, due to different business styles such as business speeds. We have usually contacted with the R&D sections of large-scale companies, rather than their marketing sections. However, large-scale companies have strict rules such as those related to confidentiality, resulting in a difficulty for local SMEs to understand what large-scale companies want." (Interview No. 45)

Moreover, whilst the TAMA Association has recognised the necessity of expanding local SMEs' international businesses (TAMA Association, 2007), the general manager continued:

"The internationalisation of local SMEs is difficult, since our association and local SMEs have not possessed much experiences and know-how about overseas businesses.<sup>25</sup> We have not usually contacted and communicated with the Japan External Trade Organisation (JETRO) and Japanese large-scale trading companies (in Tokyo's urban territory).<sup>26</sup> When supporting local SMEs' overseas business expansions, we have normally communicated with local organisations of the third sector in foreign countries." (Interview No. 45)

The TAMA Association does not benefit from the overseas networks of GOJ, as well as those of large-scale trading companies residing in Tokyo's urban territory, partly due to less political accessibility to the headquarter of METI within the metropolitan city centre. Simultaneously, not only public officials of municipal governments, but also public officials of TMG have not much know about the TAMA Association (Interview No. 42). Consequently, to some extent, this industrial cluster project has failed to utilise urban capital and/or resources. This is partly because the TAMA (as the designated project area) does not cover Tokyo's urban territory.

Overall, with Tokyo's suburban territory, different tiers of government and related entities have separately worked for industrial and commercial promotion. Apart from the TAMA Association, there have existed some entities engaged in this sort of promotion, such as the Tokyo Metropolitan SME Support Centre and the Regional Industrial Cluster Association alongside the JR Ome Line. Whilst TMG has previously made efforts for an industrial and commercial project called the Silk Road Project, this project was not long-lasting (Interview No. 1). These entities

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<sup>25</sup> The TAMA Association has continuously made efforts to expand overseas networks. For example, in 2015, it established an overseas branch in Thailand.

<sup>26</sup> The JETRO is a para-governmental entity (one of independent administrative agencies) established in 2003 under METI to promote trading projects with foreign countries and make research in businesses and marketing related to developing countries.

and their projects have been implemented without much coordination and cooperation, resulting in a failure to create powerful outcomes enough to prevent the current fast progress of suburban economic shrinkage. In short, the current mode of suburban economic development has increasingly faced institutional fragmentation.

## **7.6 Localisation of Political and Planning Agendas and Increased Limitations for Wider Economic Development in Municipal-level Public Affairs**

For an understanding of Tokyo's suburban restructuring, it is crucial to pay attention to inter-sectoral dynamics, not only inter-governmental dynamics. As discussed above, upper-level governmental entities have retreated from Tokyo's suburban territory in all the policy domains with different causal relationships among these domains. In this situation, new inter-sectoral dynamics in municipal-level public administration have created new suburban struggles. Under the recent uprising of a social welfare regime, the political and policy agendas and priorities of municipal governments have been increasingly localised, while being accelerated by GOJ's policy about the ICCS and the restructuring of TMG's regional-wide hospitals. For instance, poorer people with lesser mobile capabilities, especially the elderly and/or low-income people supported by public assistances, have been increasingly marginalised (Interviews No. 22 & 24).<sup>27</sup> Under the increased necessity to care about these marginalised people, municipal governments have struggled with rapidly augmented social welfare burdens. In fact, currently, social welfare expenditures have become more dominant than public work expenditures (Interview No. 18). Thus, importantly, this localisation of policy and planning agendas for social welfare issues has increasingly narrowed municipal governments' perspectives and scopes, as well as the minds and thoughts of public officials. This narrowing has been accelerated by both inter-governmental and inter-sectoral dynamics. Consequently, nowadays, a political and policy contrast has been more prominently observed within Tokyo Metropolis. That is, GOJ and TMG have stressed Tokyo's urban territory with more attention to global affairs for economic reasons. By contrast, municipal governments have localised their thoughts and actions with more attention to local affairs for socio-demographic reasons.

Accordingly, the increasingly narrowed perspectives and scopes of municipal governments have resulted in more defensive attitudes and thoughts for industrial and commercial promotion, whilst the creation of economic connections within wider spatial scales is crucial to escape from suburban economic shrinkage. Even from the perspective of local ordinances for industrial

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<sup>27</sup> One professor commented the following: "after the start of a new social insurance system in 2000 under the Long-term Care Insurance Act of 1997, an importance in the social welfare field has gradually shifted from disease prevention to health maintenance. Now is the time to consider the wealth of life. However, I think that municipal governments have not sufficiently recognised this, notwithstanding the situation that elderly singles or couples have rapidly been increasing" (Interview No. 22). This political and policy stress on health maintenance has also accelerated the localisation of municipal governments' political and policy agendas.

attraction, municipal governments have seemingly tended to concentrate only on maintaining existing industries within their cities, rather than attracting new industries.<sup>28</sup> Their less proactiveness for industrial and commercial promotion has been caused partly by the lack of relevant tangible and/or intangible resources. If municipal governments wish to seriously complement the lack of human resources, they can utilise relevant highly skilled personnel pooled within Tokyo's suburban territory, including retired people.<sup>29</sup> However, precedentism within each municipal government has hindered this sort of action. Consequently, alongside the increasingly narrowed perspectives and scopes only for social welfare issues, municipal governments have increasingly become less capable of creating wider economic linkages for industrial and commercial promotion.

In this situation, municipal governments have often desired for the increase in subsidies as a solution to change the current situation (Interview No. 24). In fact, TMG has recently increased subsidies for municipal governments, responding to their requests (Interview No. 21). However, this sort of financial support would be insufficient for municipal governments to solve their problems, since most of increased subsidies are likely to disappear for social welfare. Moreover, there is little time for each municipal government to foster necessary human resources and networks for suburban economic development enough to escape from the inexorable process of suburban economic shrinkage.

Nowadays, the more effective utilisation of human and financial resources through inter-sectoral collaboration would increasingly become crucial for municipal governments. However, sectionalism within each municipal government has hindered this inter-sectoral policy cooperation. Especially under suburban shrinkage, this sectionalism would serve as an obstacle for industrial and commercial promotion. Notably, the policy domains of industrial and commercial promotion and social welfare improvement have been increasingly interlinked within Tokyo's suburban territory, owing to the market expansion of social welfare industries. In fact, social welfare industries have great contributory potential to economic revitalisation (Nagasaka, Ozawa and Nakazono, 2011; W. Suzuki, 2011). However, municipal governments have felt it difficult to position social welfare industries as the main driver for industrial and commercial promotion in their official plans, since these industries have traditionally been positioned as part of civil services (Interview No. 42). In this situation, public officials of social welfare administrative sections have not viewed social welfare industries as potential industries for suburban economic revitalisation. Simultaneously, public officials of the other two policy domains do not fully recognise that the social welfare policy domain is the most major component of current municipal-level public affairs, resulting in little cooperation among different

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<sup>28</sup> M. Yoshida (1995) stresses the necessity to attract high-tech industries for suburban economic revitalisation.

<sup>29</sup> Regarding pooled labour forces, one professor commented the following; "I have conducted open lectures. One subject is for participants to prepare their personal guidebooks, which show their histories. Males aged from 60 to 80 have proactively attended, while I expected that most participants would be females. Elderly people who are healthy after their retirement are looking for places to communicate with others. However, there are little spaces for this purpose even within public-sector cultural facilities." (Interview No. 22).

policy domains (Interview No. 17). It is partly because urban and infrastructure administrative sections that had taken the lead during suburban growth seem to still have strong powers in municipal-level public affairs.<sup>30</sup> Consequently, social welfare industries have not been fully exploited for suburban economic development in municipal-level public administration.

While municipal-level mayors have tended to be conservative (Interview No. 1), it is difficult to overcome inter-sectoral barriers. Consequently, without radical changes, the increasingly localised political and policy agendas, narrowing perspectives and scopes, and worsened fiscal limitations would continue to accelerate municipal governments' non-proactiveness for industrial and commercial promotion. Consequently, suburban economic shrinkage would progress at a faster pace than suburban socio-demographic shrinkage.

## **7.7 New Local Movements of Lesser Mobile Actors and Their Foreseen Difficulties**

Under the metropolitan-wide locational restructuring of greater mobile actors, there has occurred the local-wide locational restructuring of lesser mobile actors. The out-migration of production plants of large-scale companies has triggered the out-migration of local residents, especially those rooted in newcomer communities, due to the loss of job opportunities (Interview No. 43). Here, newcomer communities have tended to be more footloose than traditional communities, whilst there are no numerical evidences (Interview No. 36). Moreover, some local SMEs out-migrated to follow out-migrated production plants (Interview No. 34), presumably triggering the out-migration of local residents working for local SMEs, even those in traditional communities. In this way, the out-migration of greater mobile actors has resulted in that of lesser mobile actors. In this out-migration process, there would be specific linkages between economic and non-economic (or social) actors, namely global enterprises-to-newcomer communities and local SMEs-to-traditional communities, not only economic linkages between global enterprises and local SMEs. Thus, the out-migration of global economic actors, which has been partly triggered by the retreat of upper-level governmental entities, has resulted in a vicious spiral of weakening linkages among all local actors. Yet, at the same time, there have emerged new local movements anchored in localities, in which local actors have responded to the new conditions of suburban shrinkage. These local movements can be mainly classified into the following two types, namely: 1) business entrepreneurship movements by local economic actors and 2) local community movements by local non-economic (or social) actors.

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<sup>30</sup> Pike, Rodríguez-Pose and Tomaney (2016: 8) notes that "[n]evertheless, despite the ebbing of Spatial Keynesianism, physical infrastructure investments and incentives for mobile investments remain popular with policy-makers. They still remain central to the policy repertoire of local and regional development authorities across the world". Moreover, Glaeser (2012: 9) notes that "[t]he hallmark of declining cities is that they have *too much* housing and infrastructure relative to the strength of their economies...Ultimately, the job of urban government isn't to fund buildings or rail lines that can't possibly cover their costs, but to care for the city's citizens. A mayor who can better educate a city's children so that they can find opportunity on the other side of the globe is succeeding, even if his city is getting smaller".



### 7.7.1 New Business Entrepreneurship Movements

Local economic actors have now stimulated new business entrepreneurship movements. These movements have great potential to promote entrepreneurship and innovation, as well as fostering industrial linkages to global markets. In this regard, one general manager of the Tama Shinkin Bank commented:

“I believe that the Tama Area with a population of about 4.0 million has great potential of becoming a place of incubation and innovation. Recently, R&D activities have been under the process of restructuring in the Tama Area that already experienced the overseas transfers of production plants. In this situation, there are mainly two types of business entrepreneurship. One is to target niche industries, such as exporting of parts for air and military industries by persons who previously worked for trading companies. The other is to target pre-fabrication industries, such as advanced measurement apparatus for medical care, by technical staffs and researchers who resigned from the R&D facilities of large-scale enterprises due to personnel restructuring.” (Interview No. 37)

In this regard, entrepreneurship potential varies across Tokyo's suburban territory, as the general manager continued:

“I have conducted entrepreneurship seminars within the Tama Area. According to the number of attendants, entrepreneurship activities have decreased in proportion to the distance from the metropolitan city centre. Residents in inner suburban cities and part of outer suburban cities such as Tachikawa City seem to have much greater entrepreneurship minds than the other outer suburban cities beyond Tachikawa City, such as Hachioji City and Ome City. From the viewpoint of railway lines, entrepreneurship minds seem to be greater in the following order: the JR Chuo Line, Keio Line and Seibu Shinjuku Line...Now, lifestyles and societal values have been changing. There have increased people who want to work near their homes to treasure time with their families by avoiding long commutes. This is partly because double-income families have been increasing. These people have tended to start their own businesses in the Tama Area.” (Interview No. 37).

Therefore, it is important to stimulate, or support, these business entrepreneurs. Besides, it is necessary to promote new types of interactions for the promotion of entrepreneurship and innovation. For this purpose, the attraction (and/or stimulation) of the “Creative Class” (Florida, 2002, 2004) could be a key policy challenge especially for Tokyo's outer suburban territory. Taking advantage of well-structured transport and ICT infrastructures, it is important to attract urban actors of this sort, not only stimulating existing suburban actors. Even if they might commute to Tokyo's urban territory, they can work at home and/or might engage in new entrepreneurship movements in the future. Besides, this sort of attraction and stimulation would create new interactions with existing local SMEs.

Local SMEs within Tokyo's suburban territory have international competitiveness especially in the Asia region. According to the survey on one hundred and fifteen (115) local SMEs that have already undergone overseas businesses, the Tama Shinkin Bank (2010) suggests that approximately 90 percent of them have been operating their businesses in the Asian region

(China: 54 percent; Northeast Asia: 18 percent; Southeast Asia: 19 percent; the US: 5 percent; and others: 4 percent). Their main businesses are mainly related to the development, production, or fabrication of precision machineries and/or measurement instruments. Thus, their overseas businesses have gradually expanded (Tama Shinkin Bank, 2010). However, according to the Tokyo Keizai University and Tama Shinkin Bank (2015), triggers of local SMEs' international business development are mainly requests from their clients, presumably large-scale enterprises, as well as the spontaneous actions of local SMEs' managers driven by their sense of crisis about the shrinking domestic market. However, local SMEs do not significantly benefit from the public sector in their international business expansion (Tokyo Keizai University and Tama Shinkin Bank, 2015). These implicitly indicate that local SMEs within Tokyo's suburban territory have substantially relied on their relationships with global economic actors.

Under the retreat of global economic actors, local SMEs might reduce their opportunities for overseas business expansion, even for information gathering. Tamano (2013) suggests that local SMEs do not independently serve for economic growth, even if possessing advanced techniques with innovative potential. Local SMEs can contribute to the local economy, once their commodities and services come to be transacted at comparatively higher prices within global markets. For this purpose, global economic actors are important to connect local SMEs to global markets (Tamano, 2013). Therefore, under the retreat of global economic actors, it is essential to ensure local SMEs' accesses to the urban capital and/or resources of global economic actors, such as their relevant know-how and networks.<sup>31</sup> Simultaneously, while local SMEs do not sufficiently benefit from the government sector, this indicates a possibility that better public supports would promote their overseas business expansion.<sup>32</sup> In this vein, by fixing the current progress of institutional fragmentation, it is necessary to make better institutional systems for suburban economic development, which can ensure urban-suburban linkages and strengthen global and local connectivity, to create new interactions among global, urban actors and local, suburban actors.

### **7.7.2 New Local Community Movements**

Local non-economic (or social) actors, such as local NPOs and community groups, have recently begun new local community movements, responding to the new conditions of suburban shrinkage. Since the 2000s, municipal governments have promoted civic engagement, partly being sustained by the Act on Promotion of Specified Non-profit Activities of 1998. Whilst this was initially motivated by the increased importance of democratic participation in township development, this has recently been accelerated by their sense of crisis about suburban

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<sup>31</sup> Hamada (2013) stresses the importance of human resources who can work at the global level within Tokyo's suburban territory.

<sup>32</sup> Yoneda (2016) suggests that local governments related to Tokyo's suburban territory need to proactively engage in the creation of networks and partnerships among various actors for business expansion.

shrinkage. Municipal governments have increasingly recognised the necessity to share issues and problems with local communities partly due to their limited resources. NPOs have steadily increased within Tokyo's suburban territory, especially in the social welfare policy domain. Simultaneously, municipal governments have been eager to enact local ordinances for civic engagement. The timings of their enactment vary; as for some outer suburban municipalities, 2002 for Hachioji City, 2008 for Ome City, and 2012 for Tachikawa City, and as for some inner suburban municipalities, 2003 for Mitaka City, 2014 for Fuchu City, and 2012 for Chofu City. Even compared with inner suburban municipalities, outer suburban municipalities have taken actions without any delay, as observed in Hachioji City and Ome City as early adopters.<sup>33</sup>

Notably, newcomer and traditional communities, each with distinct social, economic and cultural characteristics, have differently contributed to local affairs. Simply, newcomer communities tend to serve for the creation of new local capital, and traditional communities tend to work for the preservation of existing local capital (Interviews No. 38, 40, 41 and 43). Firstly, as for newcomer communities, they have spontaneously created new activities to supplement deficient parts of municipal-level public affairs, partly because they have possessed different views from traditional communities (Interviews No. 38 & 40). For one example, one of newcomer communities in Hino City have started their community farm, as the representative of this NPO commented:

“This community farm originated from our previous grassroots action for the reduction of household wastes, which was one serious issue in the Tama Area. By collecting kitchen wastes through mutual agreements, we have utilised them as organic fertilizers for our farming. Since we are welcome to everyone at any time, various people (ranging from children, through students, to elderly people) participate in our activities on a spontaneous basis. Since the number of participants has steadily increased, our farm has served as a place of community creation and multi-generational interactions, including the provision of educational opportunities for children and social interactions for the isolated elderly. The administrative section of environment promotion of Hino City Government has helped our farm, whilst it took long for us to build better connections with it...However, our farm now faces the difficulty of continuation, facing the year 2022 problem when the tax relaxation system of the Productive Green Lands under Productive Green Land Act of 1974 might be abolished.<sup>34</sup> Whilst we rent these lands (of the Productive Green Lands) from some landlords, they wish to implement a land readjustment project to sell their lands at higher prices in the future, possibly resulting in the discontinuation of our farm. If the tax relaxation system will be abolished, many of the Productive Green Lands are likely to disappear in the Tama Area, resulting in the loss of agricultural bases and weakening of social ties.” (Interview No. 38)

This sort of local community movement would contribute to diminishing social welfare burdens on municipal governments. For another example, one of newcomer communities in Ome City,

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<sup>33</sup> According to an informal talk, one public official of Tachikawa City Government commented the following; “large-size NPOs tend to be difficult for municipal governments to collaborate with, since some of them tend to be against the governmental authority. Small-size NPOs tend to strongly rely on public supports. Therefore, it is easy and fruitful to collaborate with medium-size NPOs by establishing equal partnerships”.

<sup>34</sup> According to an informal talk, GOJ is very recently trying to change this policy direction to preserve the Productive Green Lands.

who in-migrated during suburban growth, have started their community activities for the improvement of childcare environments, in which Ome City was at that time behind other cities (Interview No. 40), as detailed in Chapter 8.

Next, as for traditional communities, they tend to work for the preservation of existing local capital. For instance, a community group in the fringe areas of Ome City has begun to work for the preservation of local schools and revitalisation of their surrounding areas, as one of the representatives of this group commented:

“Our community activities originally aimed at the preservation of elementary schools that have faced a crisis due to the decrease in the number of children. Initially, this action was motivated by school heads. Afterwards, our scopes have expanded into the revitalisation of our surrounding communities aimed at preventing further population out-migration. Since I previously worked for a fire brigade team, I could establish human networks with the public officials of Ome City Government, which are beneficial to expand our activities.<sup>35</sup> Now, we have been offering some events to promote population in-migration. One event offers agricultural experiences. Participants from the Special Ward Area have steadily been increasing. Whilst there are some people who wish to in-migrate into our city, there are no attractive houses to accommodate them. Ome City Government has started a banking system of vacant houses.<sup>36</sup> However, housing owners (mostly the elderly) do not like to release vacant houses even if they are not living there...Ome City Government, rather than TMG, is important for our activities. However, municipal governments think that local communities would do something for their cities, and vice versa.” (Interview No. 41)

Whilst this community movement originally sought to prevent further depopulation, it has now turned to seek for the in-migration of urbanites who increasingly become interested in slow life. Presumably, this sort of local community movement has emerged especially in the fringe areas of Tokyo's outer suburban territory. Moreover, traditional communities with strong territorial ties have served for social surveillance, especially for the increasingly marginalised elderly (Interviews No. 17 & 18). In these ways, the local movements of newcomer and traditional communities have created “social capital” (Schuller, Baron and Field, 2000), such as the expansion of their multi-generational relationships and creation of new urban-suburban interactions. Simultaneously, entrepreneurship movements have emerged from these community activities, albeit mainly in the social welfare field (Interview No. 40).

Notably, traditional communities, who previously stepped aside from newcomer communities, have been stimulated by newcomer communities (Interview No. 40). While Birch (1975) observes increased tensions between newcomer and traditional communities during suburban growth, these tensions have been increasingly softened while tackling suburban shrinkage together. Consequently, their interactions between newcomer and traditional communities have

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<sup>35</sup> In Japan, fire brigade teams have traditionally been established in the form of belonging to local governments under the Fire Defense Organisation Act of 1947.

<sup>36</sup> The increase in the number of vacant houses becomes one serious issue in Japan (Makino, 2014). One private practitioner commented the following; “the conversion of vacant houses into park or green spaces is one countermeasure against suburban shrinkage. Recently, the vacancy rate now reaches about 13 percent, while about 5 percent would be adequate for the market of used houses. The utilisation of citizenship bonds can be considered for the promotion of this sort of conversion” (Interview No. 15).

created new possibilities, as one of the representatives of an NPO working for city revitalisation through art and cultural activities in Ome City commented:

“Traditional communities are important for us. Since they wanted to prevent the further decline of their commercial district, they offered us to open this cafe, which enables us to show our activities to the public. Before opening this cafe, we were closed in a small room of a condominium. Information dissemination to the public is important. After establishing close relationships with traditional communities, our activities have significantly expanded thanks to their human networks. In turn, we have different strengths from them. We have human networks with specialised professionals in the outside of our city, which traditional communities do not possess. We invited artists from the outside city for cultural events at elementary schools in our city...We can contribute to facilitating interactions with other cities, such as offerings of art-related lectures and collaborations with other NPOs...However, we need more subsidies from the government sector. Recently, as two-income families have been increasing due to worsened household incomes, the number of females participating in our activities has been decreasing, especially after the economic crisis of 2008. Consequently, our revenues from membership fees have been decreasing.” (Interview No. 43)

Interactive fusions between newcomer and traditional communities have contributed to expanding and diversifying their community activities. Their interactions can be conceived as one significant ingredient of “local belonging” (Tomaney, 2015: 507), which is specific to Tokyo’s suburban territory with a mixture of newcomer and traditional communities. In these interactions, newcomer communities have contributed to diversifying urban-suburban interactions by attracting the “Creative Class” (Florida, 2002, 2004) from Tokyo’s urban territory. This would contribute to strengthening urban-suburban linkages and further creating new suburban economic development potential. In my impression, traditional communities have stronger ties with municipal-level public officials, so they would receive public supports for their local activities at faster timings than newcomer communities. However, traditional communities have taken their actions at later timings than newcomer communities. Therefore, interactions between newcomer and traditional communities can bring out more fruitful outcomes through the mutual reinforcement of their strengths and weaknesses. In summary, local community movements have the following contributory potential: 1) to reduce social welfare burdens on municipal governments and increase their capacities for industrial and commercial promotion, 2) to create new urban-suburban linkages that would contribute to the creation of new suburban economic development potential, and 3) to be evolved into economic activities. The promotion of local community movements is important to tackle suburban shrinkage, especially for Tokyo’s outer suburban territory.

In this vein, municipal governments are key entities for these movements, rather than upper-level governmental entities (Interviews No. 38, 40, 41 & 43). Whilst municipal governments under their severe fiscal conditions have made their best efforts for these movements, they have failed to provide better supports to some extent (Interviews No. 38, 40, 41 & 43). For instance, public supports are weak at the initial stage of community activities suffering a lack of funding (Interview No. 40). Simultaneously, it takes long for community groups to establish

better relationships with municipal governments (Interviews No. 38 & 40). Nevertheless, community groups face the difficulty of maintaining long-term relationships due to fast personnel rotations of public officials among different administrative sections (Interview No. 40). Even if entrepreneurship movements have emerged from community activities, entrepreneurs have failed to continue their businesses without much public supports (Interview No. 40). Moreover, municipal governments cannot catch up with the diversification of local community movements due to less flexibility under sectionalism. That is, a municipal government becomes unable to identify which administrative sections should take charge of a local community group with diversified perspectives and scopes of activity (Interview No. 38). In this situation, differently from private-sector entities, municipal governments are slow to change, since they always intend to operate in the same way as the previous year without any changes for the next year; this is especially relevant to traditional cities (Interview No. 41). This is partly because the elderly, who are still influential in local affairs, are still captured by their past experiences during suburban growth, and are reluctant to change their thoughts and actions (Interview No. 41). Besides, increasingly rigid rules for public officials about communications even with local residents have hindered the establishment of mutual relationships (Interview No. 38). Now, it is important for municipal governments to improve flexibility for the strengthening of local community movements by understanding the needs of local communities.

Simultaneously, upper-level governmental entities need to consider some reforms, including those in legal and institutional frameworks. For instance, while there exist some urbanites who like to in-migrate into Ome City with use of the vacant house bank system, there exist restrictions on building and/or renovation activities for vacant houses within the UCAs, resulting in the difficulty of offering desired residences (Interview No. 41). Therefore, not only municipal governments, but also upper-level governmental entities need to consider the elimination of the existing barriers. Moreover, there existed the lack of inter-governmental information sharing between TMG and municipal governments about available public supports related to community activities (Interview No. 40). Therefore, it is necessary to facilitate this sort of inter-governmental information sharing. In these ways, upper-level governmental entities need to alter, or optimise, existing legal and institutional systems by understanding the needs of municipal governments and local communities.

Importantly, while better public supports are essential for local community movements, suburban economic shrinkage itself has become an obstacle. As one evidence, declined participation of women has resulted in the deterioration of community activities (Interview No. 43). Notably, women often play a key role in community activities (Interviews No. 41 & 43), even for making connections between newcomer and traditional communities. However, after the economic crisis of 2008, most young families have been forced to work in dual harness, resulting in the decreased participation of women (Interview No. 43). Besides, municipal governments might become unable to provide better supports under decreased tax revenues

due to suburban economic shrinkage. At the early stage of stagnation, municipal governments and local communities would be motivated to collaboratively cope with foreseen suburban shrinkage. However, the progress of suburban economic shrinkage would possibly hinder community activities from both sides of public and community sectors. Thus, suburban economic shrinkage has a possibility of weakening social ties, including those between newcomer and traditional communities, not only economic ties between global and local economic players. Therefore, even from the perspective of non-economic community activities, suburban economic development is essential to create a victorious spiral of activating community activities and transforming them into economic activities.

## **7.8 Suburban Balkanisation under Metropolitan-wide Three I's Dynamics: Degeneration from Post-suburban Space and Increasingly Localised Suburban Economy**

Exploring underlying mechanisms, Tokyo's suburban restructuring has embodied specific dynamics among different tiers of government and different policy domains, as well as those among economic actors of global and local players and non-economic (or social) actors of newcomer and traditional communities. That is, Tokyo's suburban restructuring captured by the three P's can be interpreted by the three I's anatomical framework of Inter-governmental, Inter-sectoral and Inter-actor dynamics. These relationships are illustrated in Figure 7-3.

In summary, from the perspective of inter-governmental dynamics, GOJ and TMG have retreated from Tokyo's suburban territory, while having different causal relationships by policy domain. This has increasingly magnified the ambiguity of suburban positioning within the wider context, leaving municipal governments, local SMEs and local communities to tackle suburban shrinkage alone. From the perspective of inter-sectoral dynamics, under the new inter-sectoral shift, municipal governments have been forced to narrow their perspectives and scopes for increasingly localised political and planning agendas mainly in the social welfare field. This has resulted in more defensive thoughts and attitudes for industrial and commercial promotion and less proactivity for the creation of wider economic linkages. From the perspective of inter-actor dynamics, the retreat of upper-level governmental entities and global economic actors has triggered the out-migration of both local economic and non-economic (or social) actors. On the economic side, global and local economic actors have gradually been losing their mutual linkages, whilst there have emerged new business entrepreneurship movements. Especially, the retreat of global economic actors has weakened local SMEs' linkages to global economic circuits and wider domestic markets. On the non-economic (or social) side, local community activities have faced a risk of being deteriorated partly due to suburban economic shrinkage, while making valuable contributions to local affairs. Especially, newcomer and traditional communities have faced a risk of being separated, while their interactions have created new

possibilities. Here, linkages among non-economic (or social) actors might be weakened at a slower pace (or with time lags) than those among economic actors. Yet, the continued weakening of linkages among different actors has possibly resulted in the weakening of both global and local connectivity within Tokyo's suburban territory. In this way, these metropolitan-wide dynamics of the three I's have interactively created a vicious spiral of suburban shrinkage.

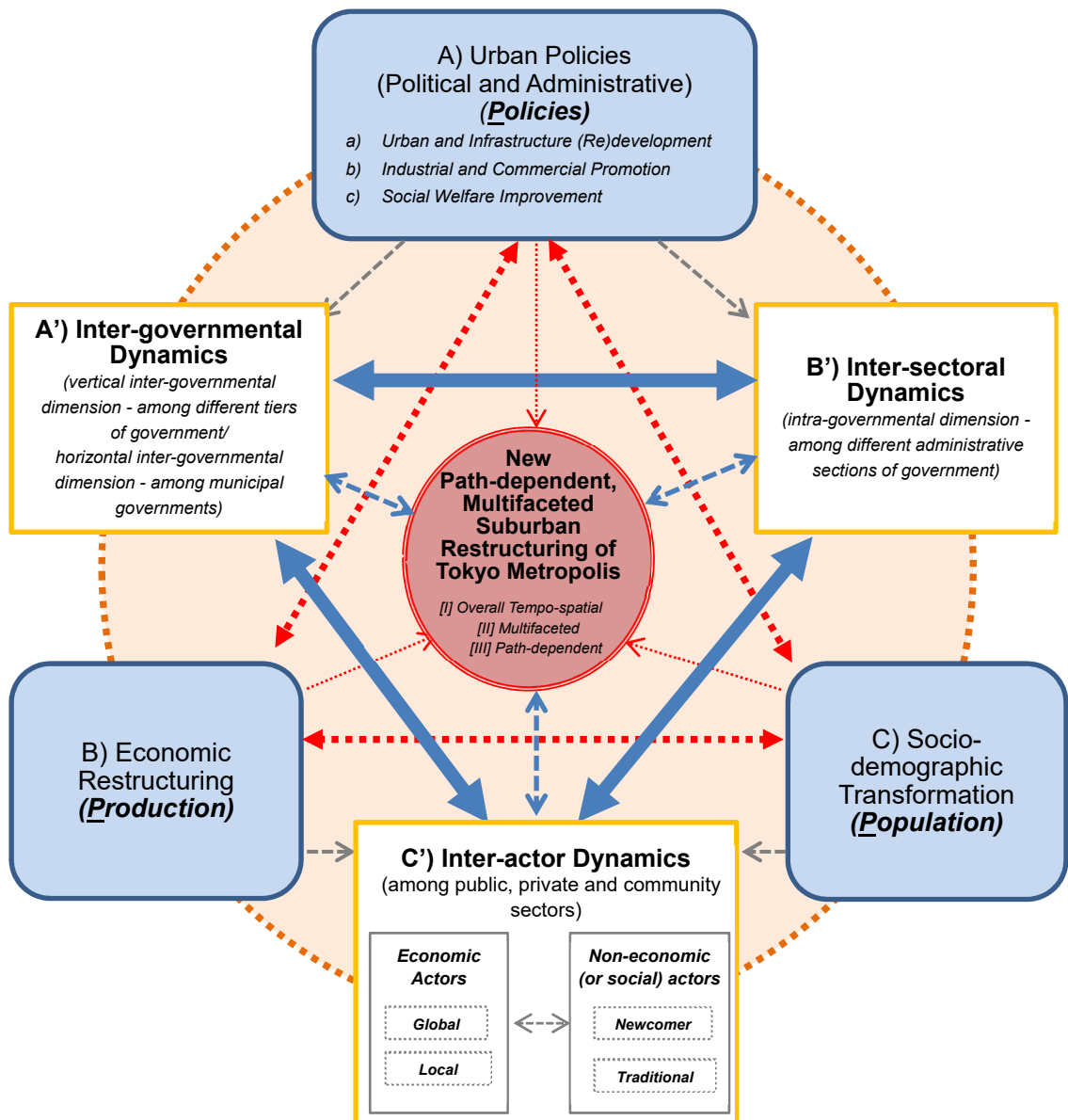
From a long-term viewpoint, the metropolitan-wide three P's dynamics have radically changed within the contextual transition from growth to shrinkage. During suburban growth, political and administrative, economic and socio-demographic prosperities had been brought together mainly through the policy domain of urban and infrastructure (re)development (primarily led by upper-level governmental entities). Alongside this, without much fiscal constraints, municipal governments could work for the provision of social welfare services and development of local economic and social infrastructures. Thus, urban and infrastructure (re)development projects could attract global economic actors, leading to the strengthening of both economic and socio-demographic linkages among different actors. In some sense, the mode of suburban transformation under suburban growth was simpler, compared with that under suburban shrinkage. However, the different modes of the three I's have emerged in the context of stagnation and/or decline, as discussed above.

Under these metropolitan-wide three I's dynamics, Tokyo's suburban territory can be conceived as being on the way of degeneration from post-suburban spaces with diverse activities to balkanised spaces that have been increasingly less diverse. Especially on the economic side, the suburban economy has been increasingly localised with a narrowing of its trading places (Bogart, 2006) by weakening industrial linkages to external territories including global economic circuits. As one evidence, one of megabanks stopped part of foreign currency-related services in Tachikawa City and Hachioji City, which were consolidated into those in Mitaka City (in the inner suburban territory). Besides, without the emergence of leading industries for next generations (Tama Shinkin Bank, 2010), local employments have been increasingly absorbed by social welfare industries as non-base industries with relatively local markets, in replace of manufacturing industries as base industries with wider economic linkages.<sup>37</sup> Consequently, Tokyo's suburban territory has been transforming from a place of production to a place of consumption. This is partly because Tokyo's suburban territory has failed to foster strong suburban centres and better industrial hierarchies prior to suburban shrinkage.

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<sup>37</sup> One private practitioner commented that it is important to create desired jobs within Tokyo's outer suburban territory, which can attract people in-migrated into the inner suburban territory (Interview No. 15).





Source: Author's own

Figure 7-3 Metropolitan-wide Three I's Dynamics:  
from Three P's Analytical Framework to Three I's Anatomical Framework

Simultaneously, growing elderly care industries within Tokyo's suburban territory, in which their jobs have been reckoned as blue-colour occupations with lower wages, have suffered job mismatches, partly due to the proximity to the metropolitan city centre (Interview No. 17). Under job diversification, elderly care industries have failed to attract young generations who wish to work in white-colour service industries in Tokyo's urban territory (Interview No. 17).<sup>38</sup> This sort of job mismatch is more serious for Tokyo's suburban territory, compared with provincial areas that can offer only elderly care-related jobs for young generations (Interview No. 17). Besides, elderly people and housewives with lesser mobility wish to work near their residences, so they choose to work at elderly care facilities (Interview No. 25). Thus, employed population within Tokyo's suburban territory has been aging. Consequently, the increasingly localised, aging suburban economy would accelerate further suburban economic shrinkage.

In this situation, Tokyo's suburban territory has increasingly detached itself from the urban territory even from the viewpoint of commuting patterns, as explained in Chapter 6. Ironically, 'suburban self-containment' has gradually been achieved when referring to the criterion of the proximity between workplace and residence. However, this detachment does not necessarily indicate the achievement of 'suburban sustainability'. It has manifested economic and socio-demographic isolation with increasingly weakened linkages to the urban territory.

In these ways, the multi-dimensional suburban isolation in political and administrative, economic and socio-demographic terms of the three P's has been generated by the metropolitan-wide dynamics of the three I's, which have served as underlying mechanisms. These complex, interactive processes can be called 'suburban balkanisation'. This notion of 'suburban balkanisation' does not simply mean the multi-dimensional urban-suburban divide. It stresses narrowing processes in terms of the three P's, even including the narrowing of minds, thoughts and actions of municipal governments in policy making and implementation. Importantly, this notion emphasises a risk of the weakening of global and local connectivity. Even, this notion includes the detachment from neighbouring provincial areas that have increased the extent of 'self-containment', not only from the urban territory.<sup>39</sup>

Now, Tokyo's suburban territory cannot be sustainable due to fewer possibilities of gaining earnings from external spaces. Continuous decreases in population and income, production and employment, and land and property values would result in the degradation of municipal-level public affairs through the diminishment of municipal tax revenues, and vice versa. Only the improvement of local market liquidity through local commercial activities and/or social welfare

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<sup>38</sup> Even for university graduates in the health care field, they prefer to work at large-scale hospitals for career building, rather than elderly care facilities in which they cannot receive good vocational trainings and salaries (Interview No. 22).

<sup>39</sup> According to an informal talk, Tokyo's suburban territory has been isolated even from provincial areas. For example, in the past, there were many visitors to Hachioji City from Yamanashi Prefecture. However, alongside increased functional self-sufficiencies within neighbouring prefectures, there is a decreased need for their residents to visit Tokyo's suburban territory. Whilst Tokyo's urban territory has attracted visitors from neighbouring prefectures thanks to its special functions, these visitors tend to pass through the suburban territory.

industries would be insufficient to ensure suburban sustainability, especially under the current rapidity of suburban shrinkage. Tokyo's suburban territory has faced "a very difficult time surviving without significant regional reforms" (Orfield, 2002: 167). Therefore, it is necessary to structurally alter these three I's dynamics to prevent further 'suburban balkanisation'.

Now, suburban economic development within wider spatial spheres is crucial in the form of creating a victorious spiral from industrial and commercial promotion to social welfare improvement. However, comparatively, Tokyo's suburban territory had, or has, continued to be a vacuum of public intervention in the policy domain of industrial and commercial promotion. Even though the importance of industrial and commercial promotion has been increasingly recognised, institutional fragmentation for suburban economic development is the order of the day, resulting in a failure to utilise urban capital and/ or resources for suburban economic revitalisation. There would be one idea that each suburban municipality should make best efforts for city revitalisation without much reliance on upper-level governmental entities (Interview No. 39).<sup>40</sup> However, whilst this bottom-up approach would be important to accelerate local economic development, it would be insufficient. Now, for future suburban sustainability and regeneration, it is essential to establish new modes of suburban economic development that ensure new types of urban-suburban linkages, which can serve to strengthen both global and local connectivity.

In this respect, the former public official of TMG commented that it is better to go back to the concept of 'Twin Cores' consisting of Tokyo's urban and suburban territories, which was proposed by former governor Mr. Minobe (during 1967 to 1975), as described in Chapter 5. This concept would be desirable for the future. However, this is just a concept of spatial planning and development, which is nothing but pie in the sky, because it has not been secured by any institutional systems. Now, high-quality transport and ICT infrastructures have contributed to creating urban-suburban linkages. However, except for these infrastructure-based connections, powerful urban-suburban linkages for suburban economic development have not been fostered, especially in institutional terms. Now, all tiers of government need to collaboratively establish better economic institutional systems through vertical governmental integration (among different tiers of government), which would enable Tokyo's suburban territory to make the maximum use of urban capital and/or resources. Simultaneously, better inter-sectoral cooperation through intra-governmental integration (among different policy domains) should be ensured to accelerate local economic development with the maximum use of the existing capital and/or resources.

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<sup>40</sup> The same former public official of TMG continued: "the administrative separation of the suburban territory from Tokyo Metropolis would not create any advantageous conditions especially under suburban shrinkage, while having benefitted from being part of Tokyo Metropolis" (Interview No. 39).

## **7.9 Chapter Conclusion: Necessity of New Modes for Suburban Economic Development**

Tokyo's suburban territory has been increasingly isolated in political and administrative, economic and socio-demographic terms of the three P's. This multi-dimensional suburban isolation has been created by the specific metropolitan-wide dynamics of the three I's. These complex, interactive processes can be referred to as 'suburban balkanisation'. Through these processes, Tokyo's suburban territory has been degenerating from 'post-suburban' spaces to balkanised spaces with less diverse activities. Especially, in economic terms, the suburban economy has been increasingly localised by losing linkages to external territories including global economic circuits, resulting in the degeneration from a place of production to a place of consumption. Now, integrated suburban economic development is essential to escape from a vicious spiral of suburban shrinkage. Nevertheless, from an overall historical perspective, Tokyo's suburban territory had, or has, comparatively been a vacuum of public intervention in the policy domain of industrial and commercial promotion. Besides, institutional fragmentation for suburban economic development is the order of the day. Therefore, it is crucial to create new modes for suburban economic development, which can promote industrial and commercial promotion within wider spatial scales. For this purpose, it is essential to re-create new types of multi-dimensional urban-suburban linkages in political and administrative, economic and socio-demographic terms under vertical governmental integration (among different tiers of government). Simultaneously, intra-governmental integration (among different policy domains) with better inter-sectoral cooperation needs to be achieved to fully exploit suburban economic development potential.

## **Chapter 8**

# **Anatomising Different Trajectories of Tachikawa City, Hachioji City and Ome City from a Local Perspective through Qualitative Approach**

### **8.1 Chapter Introduction**

This chapter explores the underlying mechanisms of the different trajectories of Tachikawa City, Hachioji City and Ome City from a local perspective through the qualitative approach. Then, it addresses new types of inter-municipal dynamics emerged under suburban shrinkage. From the perspective of the three P's, outer suburban municipalities have experienced divergence within the contextual transition from growth to shrinkage, whilst inner suburban municipalities have experienced convergence. In this divergence, Tachikawa City, Hachioji City and Ome City have experienced the different trajectories of the three P's, namely their multi-dimensional differentiations, which are respectively characterised by 'growth', 'stagnation' and 'decline' in broad terms. Therefore, an investigation into their different trajectories enables us to comprehend the underlying mechanisms of outer suburban divergence taken place under the process of 'suburban balkanisation' as metropolitan-wide dynamics. Thus, it is revealed that their different trajectories have been materialised primarily by local differentiations of the metropolitan-wide three I's dynamics. Besides, their multi-dimensional differentiations have led to differentiating their policy and planning agendas and priorities. Together with newly emerged obstacles under suburban shrinkage, their differentiations have resulted in the difficulty of inter-municipal collaboration only by municipal governments without any involvements of upper-level governmental entities, especially in the policy domain of industrial and commercial promotion. In this vein, it is argued that new modes of inter-municipal collaboration for suburban economic development should be established under horizontal inter-governmental integration, together with vertical inter-governmental and intra-governmental integrations.

### **8.2 Introduction to Tachikawa City, Hachioji City and Ome City**

Historically, Tachikawa City, Hachioji City and Ome City have served as key outer suburban cities in Tokyo's suburban planning and development. Geographically, Tachikawa City is almost adjacent to the inner suburban territory, and Hachioji City and Ome City are located on the edge of the outer suburban territory. Their locations are shown in Figure 8-1. The distances of Tachikawa City, Hachioji City and Ome City from the metropolitan city centre, namely from JR Tokyo Station, are respectively 32.6, 40.4 and 45.9 kilometres. The administrative area (as of

2010), population (as of 2015) and employment (workplace) (as of 2014) of these three cities are as follows: for Tachikawa City, 2,438 (ha), 176,295 (persons) and 119,144 (persons); for Hachioji City, 18,631 (ha), 577,513 (persons) and 231,984 (persons); and for Ome City, 10,326 (ha), 137,381 (persons) and 55,506 (persons). Tachikawa City and Hachioji City are located alongside the JR Chuo Line, and Ome City is alongside the JR Ome Line connected to the JR Chuo Line at JR Tachikawa Station. All these cities have direct trains to JR Tokyo Station.



Source: Author's own (as for the background picture, purchased from the Shutterstock)

Figure 8-1 Locations of Tachikawa City, Hachioji City and Ome City

### a) Tachikawa City

Tachikawa City has grown to be the most strategic business and commercial centre in Tokyo's outer suburban territory. An aerial photograph of Tachikawa City is shown in Figure 8-2, and its proposed future urban structure is depicted in Figure 8-3. The successful transformation of Tachikawa City has been achieved through the upper-level governmental entities-led redevelopment of the former US Tachikawa Air Base. Alongside this redevelopment, the Tama Monorail was constructed by a third-sector entity led by TMG in the form of connecting Tachikawa City with north- and south-side suburban cities. Consequently, Tachikawa City which was previously called the 'City of Army Base' has now become the 'City of Commerce'. Yet, compared with Hachioji City and Ome City, Tachikawa City does not have a long tradition, and does not have much manufacturing industries. From the viewpoint of urban structure, Tachikawa City is relatively compact, compared with the other two cities.<sup>1</sup>

<sup>1</sup> For the city master plans of the three cities, see Tachikawa City Government (2017), Hachioji City Government (2015) and Ome City Government (2014).

## **b) Hachioji City**

Hachioji City is the largest suburban municipality within Tokyo's suburban territory in terms of both administrative area and population. An aerial photograph of Hachioji City is shown in Figure 8-4, and its proposed future urban structure is depicted in Figure 8-5. From the viewpoint of urban structure, Hachioji City has multiple cores within the large administrative area. Hachioji City has a long tradition, in which it is the first case of being municipalised in 1917 within Tokyo's suburban territory. It flourished as one of the main post stations during the Edo era (1603-1867) and as a centre of sericultural and textile industries during the Meiji era (1868-1912).

Consequently, it became famous as the 'City of Mulberry'. Afterwards, under the initiative of GOJ, Hachioji City became a key industrial city, absorbing neighbouring suburban municipalities through administrative annexes (M. Suzuki, 1993b).<sup>2</sup> In this vein, it was prioritised in the post-WWII reconstruction (Ikeda, 1999). After the decline of textile and clothing industries, Hachioji City enjoyed the in-migration of production plants and R&D facilities of large-scale companies, as well as that of university campuses. Consequently, it has become famous as an academic city. In 2015, Hachioji City was upgraded to one of the Core Cities under the Local Autonomy Law of 1947, which can broaden their powers and responsibilities for municipal affairs; Hachioji City is the first case of being upgraded to the Core City within Tokyo's suburban territory.<sup>3</sup>

## **c) Ome City**

Ome City has been surrounded by rich natural environments, resulting in a vast area of the UCAs. Ome City also has a long tradition. An aerial photograph of Ome City is shown in Figure 8-6, and its proposed future urban structure is depicted in Figure 8-7. Ome City prospered by textile industries in the similar way as Hachioji City, as well as by forestry and wooden industries. During the past massive suburbanisation, it experienced the in-migration of production plants and R&D facilities. Ome City is the most important suburban city of the Nishi-Tama Network as an inter-municipal consortium; Hachioji City and Tachikawa City are not part of this consortium. Ome City has begun to experience population decline at the fastest timing among these three cities. It has attempted to revitalise itself by leveraging on rich natural environments that can hardly be found elsewhere within Tokyo's suburban territory. From the viewpoint of urban structure, Ome City has old and new cores within the administrative area, because the old city centre is more distant from the new city centre, when compared to Hachioji City.

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<sup>2</sup> According to the first national census in 1920, Hachioji City had a relatively high share of secondary industries; the shares of primary-, secondary- and tertiary-sector employments were respectively 5.3, 53.1, and 37.8 percent for Hachioji City, while being respectively 57.8, 21.3, and 19.6 percent for entire Tokyo's suburban territory (M. Suzuki, 1993b).

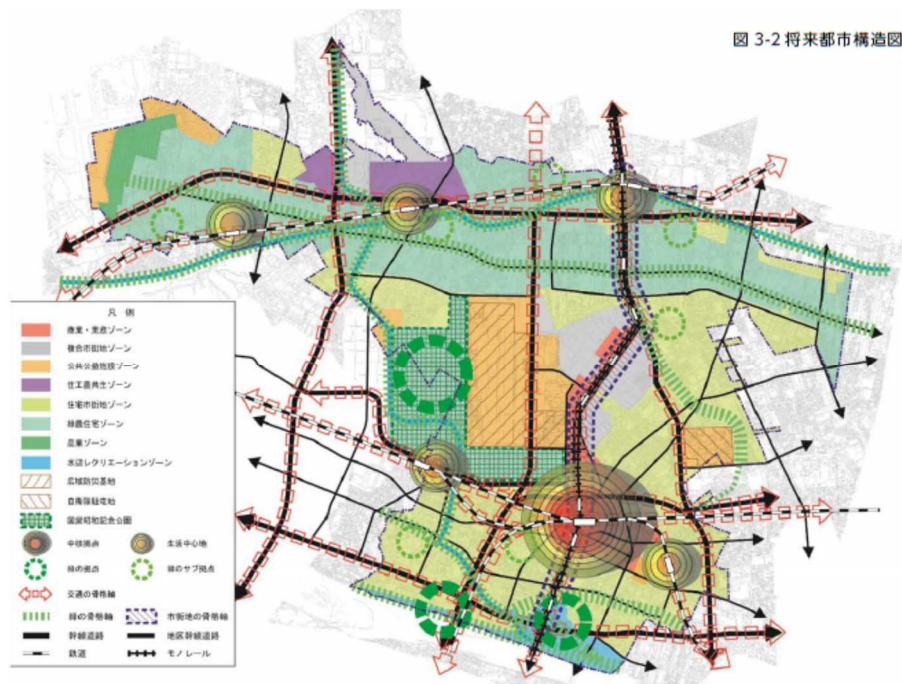
<sup>3</sup> The Core Cities are designated for relatively large cities with a population of more than 300 thousand. Through this designation, the discretionary powers of municipal governments expand through the transfer of part of prefectural-level public affairs. CLAIR (2012: 6) notes that "[c]ore cities may have health care centers and they are capable of handling the same affairs as designated cities, excluding those matters that are more efficiently and uniformly handled by prefectures across their broader jurisdictions". To be noted, the Core Cities are totally different from the BCCs.





Source: Tachikawa City Government ([www.city.tachikawa.lg.jp/kikakuseisaku/shise/sesaku/kekaku/4sogo.html](http://www.city.tachikawa.lg.jp/kikakuseisaku/shise/sesaku/kekaku/4sogo.html))

Figure 8-2 Aerial Photograph of Tachikawa City



Source: Tachikawa City Government (2017)

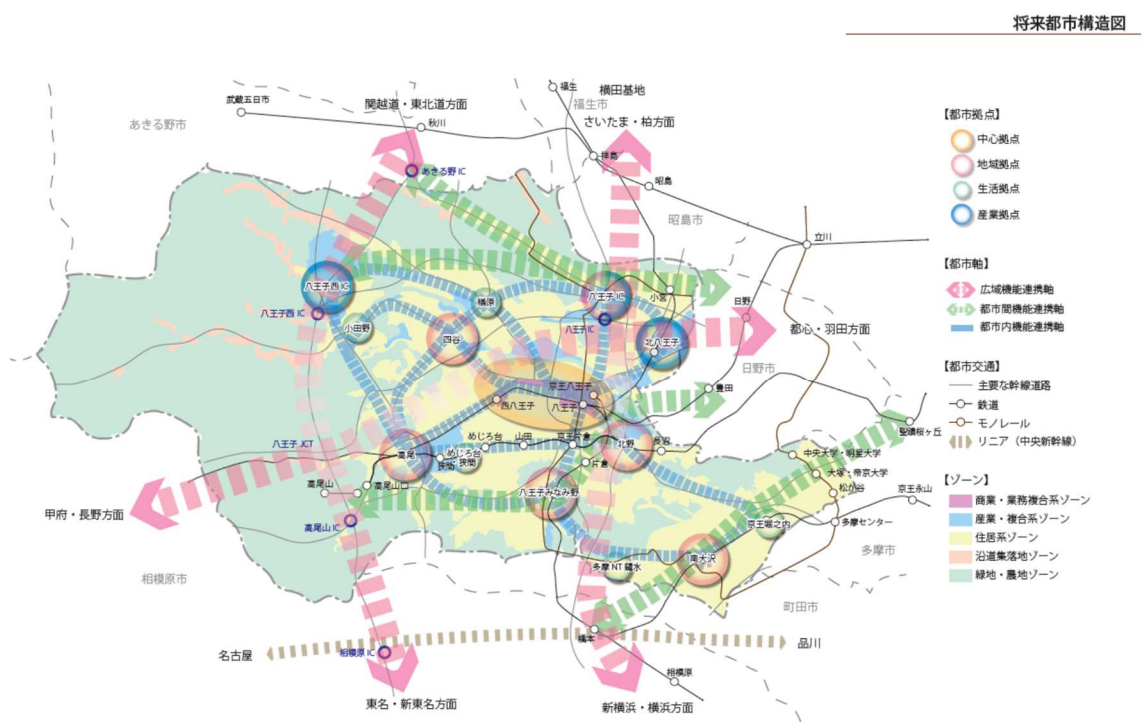
Figure 8-3 Future Urban Structure of Tachikawa City





Source: Hachioji City Government (2012)

Figure 8-4 Aerial Photograph of Hachioji City



Source: Hachioji City Government (2015)

Figure 8-5 Future Urban Structure of Hachioji City



Source: Ome City Government ([www.city.ome.tokyo.jp/shisei/shi\\_shokai/shi\\_syashin\\_ayumi.html](http://www.city.ome.tokyo.jp/shisei/shi_shokai/shi_syashin_ayumi.html))

Figure 8-6 Aerial Photograph of Ome City



Source: Ome City Government (2014)

Figure 8-7 Future Urban Structure of Ome City

### 8.3 Different Trajectories of Tachikawa City, Hachioji City and Ome City

#### 8.3.1 Recent Socio-demographic Transformation

Tachikawa City has experienced population growth, especially in high-income groups (Interview No. 2). However, higher land and property values have pushed out young married couples into adjacent cities with lower housing prices, when they purchase or rent houses (Interview No. 2). Moreover, a large volume of the elderly has moved from Tachikawa City into Ome City, not into Hachioji City (Interview No. 27). It is partly because private developers had built many elderly care facilities in Ome City during suburban growth, taking advantage of cheaper lands within the UCAs (Interview No. 28). This migration of the elderly from Tachikawa City into Ome City is one example of local-wide locational restructuring in socio-demographic terms. Furthermore, Tachikawa City has suffered the rapidly increased in-migration of low-income people who need to be publicly assisted, resulting in a widening of internal inequalities, as the public official of Tachikawa City Government commented:

“Tachikawa City has successfully increased population, but now has a much higher share of low-income persons who receive public assistances, compared with other suburban cities. Low-income people have tended to in-migrate into our city, resulting in the increase of our social welfare expenditure. Even though it is difficult to exactly identify the reasons of this in-migration, our city might provide some hopes with low-income people, in which they might think that they can survive if going to our city. Moreover, there seems to exist a tendency, in which pivotal cities serving as the terminuses of some railway lines, like our city, attract low-income people.”<sup>4</sup> (Interview No. 24).

Even for growing Tachikawa City with the lesser extent of population aging, it has suffered the increase of social welfare expenditure partly due to the increase of publicly assisted people. Presumably, the convenient environment of Tachikawa City would serve to minimise living costs, especially for transport, and to offer low-waged job opportunities to support surrounding high-order service and commercial industries. Besides, existing old public houses would serve to accommodate these low-income people (Interview No. 29). This widening of internal inequalities in Tachikawa City might be a microcosm of Sassen (2001)’s “The Global City” with a widening of socio-economic disparities.

Hachioji City has experienced population growth, but its pace has dramatically dropped within the contextual transition from growth to shrinkage. Whilst the out-migration of their residents is not so remarkable, except for university graduates, Hachioji City has experienced a gradual process of intra-city residential moves from fringe areas into nearby-station areas within the large administrative area (Interview No. 18). This intra-municipal migration has resulted in accelerating population decline and aging in the fringe areas. The development of large-scale condominiums has taken place on consolidated lands after the closures of local commercial

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<sup>4</sup> The JR Ome Line and JR Nambu Line are connected to the JR Chuo Line at JR Tachikawa Station.



shops or vacant lands after those of luxury department stores (see Figure 8-8). These condominiums would serve to accommodate the intra-city residential moves, as well as in-migrated newcomers who are likely to commute to Tokyo's urban territory.<sup>5</sup> Accordingly, Hachioji City has turned into a more residential-oriented city. However, university graduates, who wish to work for white-colour jobs in high-order service industries, tend to out-migrate from Hachioji City into Tokyo's urban territory (Interview No. 17). This out-migration of university graduates, who are relatively footloose, is common for entire Tokyo's suburban territory, but it has more seriously damaged Hachioji City as an academic city.



Source: Author's own

Figure 8-8 Developed Residential Condominiums in Hachioji City

Ome City has begun to suffer population decline at the fastest timing among these three cities (Interview No. 28). It has suffered the out-migration of young generations, especially young families with small children, into neighbouring cities such as Tachikawa City and Hachioji City (Interviews No. 28 & 43). Yet, this out-migration has not reached cities far from Ome City. This out-migration of young generations from Ome City into Tachikawa City or Hachioji City is another example of local-wide locational restructuring in socio-demographic terms. In this regard, newcomer communities with weaker territorial connections seem to be more footloose than traditional communities, as public officials of Ome City Government commented:

“Whilst being not justified by numerical data, my impression is that newcomer communities, which are dominant in the eastern part of Ome City, have more social population out-migration, compared with traditional communities. The mothers of newcomer families, who generally work part-time, do not mostly join residents’

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<sup>5</sup> Asahi Shimbun Digital (2016) reports that one hundred and thirty (130) dwelling units, which are part of a condominium under construction near JR Takao Station in Hachioji City, were all sold out within one day. Salesmen were anxious of its unpopularity. However, relative cheapness, transportation convenience as a station of origin, and accessibility to natural resources have attracted the families of the 30's (Asahi Shimbun Digital, 2016). There are still high demands for residential development even on the suburban edge.

associations.<sup>6</sup> They have tended to treasure mothers' networks, such as those established at kindergartens. They do not feel any reluctance to change their residence for better childcare environments. Moreover, they sometimes change kindergartens from Ome City to Hamura City (adjacent to Ome City) when hearing good rumours through their networks." (Interview No. 36)

Moreover, the out-migration of production plants and R&D facilities of large-scale companies, which has resulted in job loss, has triggered the out-migration of young generations (Interview No. 43). Even the out-migration of a production plant in Hamura City impacted Ome City, since a company housing for its employees was located in Ome City (Interview No. 32). Alongside this, Ome City with many elderly care facilities has experienced the in-migration of elderly people from neighbouring suburban municipalities and even from Tokyo's urban territory (Interview No. 28). Consequently, these inter-generational trends of social migration, namely the out-migration of the young and in-migration of the elderly, have accelerated population aging and decline in Ome City at a more rapid pace, when compared to Tachikawa City and Hachioji City.

In summary, Tachikawa City can be respectively characterised as follows: for Tachikawa City, the in-migration of higher income households and publicly assisted people; for Hachioji City, intra-city residential moves with lesser out-migration, except for university students; and for Ome City, the out-migration of young generations and in-migration of elderly people. In this way, there have emerged differences in inter/intra-municipal socio-demographic restructuring among these three cities. However, the most recent population census of 2015 reveals that all of them have decreased their population during 2010 to 2015, so socio-demographic shrinkage has gradually been prevailing in Tokyo's outer suburban territory.

### **8.3.2 Recent Economic Restructuring**

Tachikawa City has experienced employment growth, especially in high-order service and commercial industries. De-industrialisation has not substantially impacted Tachikawa City with lesser manufacturing bases, differently from Hachioji City and Ome City. This economic prosperity of Tachikawa City has been materialised by proactive involvements of upper-level governmental entities through the redevelopment of the former US Tachikawa Air Base (Interviews No. 2 & 29). In this process, a central business district, called the Faret Tachikawa, was developed in 1994 by the Housing and Urban Development Corporation (presently, UR) at a site close to JR Tachikawa Station and the Tama Monorail (see Figures 8-9 and 8-10).

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<sup>6</sup> In Japan, local residents have traditionally formed residents' associations to work together for common benefits, including festivals and funerals, mainly on a voluntary basis.



Source: Author's own

Figure 8-9 Faret Tachikawa and Tama Monorail



Source: Author's own

Figure 8-10 JR Tachikawa Station Building

Accordingly, Tachikawa City has enjoyed increased commercial activities in the form of absorbing commercial consumption from neighbouring cities, even under the overall decline of annual commercial sales. This is one example of local-wide locational restructuring in economic terms.<sup>7</sup> Notably, Tachikawa City has tried to be open-mined for industrial and commercial promotion, as one representative of the Tachikawa CCI commented:

<sup>7</sup> The public official of Tachikawa City Government commented the following: “childcare-related companies in Ome City, which have suffered the out-migration of young families, have begun to seek for business opportunities in Tachikawa City. It is because they cannot easily reduce well-trained human resources” (Interview No. 25). Yet, the public official of Ome City Government commented that this action is unlikely to occur, since childcare-related companies in Ome City have historically been locality-based (Interview No. 28). Whilst this needs to be further examined, it might be another example of local-wide locational restructuring in economic terms, if any.

“The Tachikawa CCI has been collaborative with the similar associations of neighbouring cities. This openness stems from the past formation process of our association. Previously, our city was too small to form a CCI. Therefore, our association was originally established in a collaborative way with neighbouring cities. Consequently, we have maintained an attitude of ‘welcome to all’. It is also because we are the latecomer without any long tradition, differently from the Hachioji CCI.<sup>8</sup> We have been trying to be adaptive to changes in our surrounding environments. However, we feel the necessity to seek for new pathways to the future, namely our next destination after the ‘City of Commerce’.” (Interview No. 13)

Hachioji City has experienced the decline of industrial production and stagnation of commercial consumption. On the production side, Hachioji City has still accommodated various production plants, R&D facilities and logistics centres to a greater extent than Tachikawa City and Ome City. Local SMEs in Hachioji City, which originally stemmed from textile industries, have been successful in transforming their businesses into parts processing and assembling with advantage of human skills and physical facilities, establishing better relationships with large-scale manufacturing companies (Interview No. 8). This flexible adaptation of local SMEs is also observed in Ome City (Interview No. 34).<sup>9</sup> However, de-industrialisation has substantially impacted Hachioji City. After the relocation of production functions into NICs, global electronic and/or machinery companies have now tackled personnel reductions in their R&D activities (Interview No. 37). On the consumption side, the existing commercial area, which has originated from the past post station, has suffered commercial decline. Simultaneously, luxury department stores, which actively opened in Hachioji City during suburban growth, have continued to close, even though Tachikawa City has maintained this sort of store. In this situation, Hachioji City has struggled to connect the existing city centre with a large-scale roadside commercial complex far from it, partly due to its largest administrative area (Interview No. 8) (see Figure 8-11). Furthermore, the out-migration of university campuses would damage commercial activities. Under this situation, the Hachioji CCI with a very long history has taken measures to open their future pathways in a relatively independent way, as one manager of the Hachioji CCI commented:

“The Hachioji CCI has a very long history. The past presidents of our CCI tended to be elected from textile industries...Even though we have tried to collaborate with similar associations of neighbouring cities, our activities have recently been isolated from them. This isolation would be partly because of our traditional, conservative thoughts, as well as strong insistence on our own identities...As one of our strategies, we have been making efforts to revitalise local industries by connecting them with global markets. Whilst we visited the Silicon Valley for our fieldwork, we feel that it is difficult for our local SMEs to do so from the viewpoint of costs and benefits.” (Interview No. 14)

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<sup>8</sup> The years of establishment for the CCIs are as follows; 1953 for the Tachikawa CCI, 1894 for the Hachioji CCI and 1952 for the Ome CCI. As of 2012, the number of members for these CCIs are 2,895, 3,896 and 2,076 respectively.

<sup>9</sup> The public officials of Ome City Government commented the following; “the import of western lifestyles, which reduced the demands of Japanese traditional dresses (called the Kimono) resulted in the decline of textile and clothing industries. However, local SMEs in these industries have transformed their businesses for metal workings, parts processing and the production of daily necessities. For instance, Hotman Co., Ltd. in Ome City has become famous for their towels even in international markets” (Interview No. 31).

From the viewpoint of thoughts and attitudes, a remarkable contrast can be observed between the Hachioji CCI and the Tachikawa CCI, depending on their histories. Local SMEs in Hachioji City have traditionally been structured with their rigid hierarchical system (Interview No. 14), which is contrasted with those in Tachikawa City and Ome City with more flexible systems (Interviews No. 13 & 34). Whilst this hierarchical system would have caused isolation from other CCIs, it would have contributed to preventing drastic economic decline. For instance, the Hachioji CCI has actively operated local events with advantage of this hierarchical system (see Figure 8-12).



Source: Author's own

Figure 8-11 City Centre of Hachioji City



Source: Author's own

Figure 8-12 Local Event in Hachioji City



Ome City has more seriously suffered decline in both industrial production and commercial consumption. Ome City had already experienced the out-migration of production plants of large-scale electronic and/or machinery companies, and now confronts the further out-migration of their R&D activities (Interviews No. 28, 31 & 34). Since Ome City have fewer manufacturing companies than Hachioji City, their out-migrations have caused more serious damages to the local economy. Ome City has also suffered less availability of industrial zones when trying to attract large-scale industries (Interview No. 31). Moreover, the closure of a large-size food shop near JR Ome Station has caused inconvenience for local food shopping (see Figures 8-13 and 8-14), whilst this sort of closure can hardly be observed in Tachikawa City and Hachioji City. In fact, Ome City Government and the Ome CCI have faced the difficulty of preventing the out-migrations of large-scale economic actors who have made closure decisions without much in-advance notices or negotiations with them (Interview No. 44). In this situation, Ome City Government has recently received development permission-related applications, or negotiations, from lower productivity industries, such as grave or solar power industries which seek for cheap, large lands. However, Ome City Government has been reluctant to accept them, due to their less contributions to the local economy (Interview No. 30), as well as unfavourable impacts on the making of city image.<sup>10</sup>



Source: Author's own

Figure 8-13 Surrounding Areas of JR Ome Station

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<sup>10</sup> Aveline-Dubach (2012) notes that, whilst it is profitable for private companies to develop cemeteries due to their scarcity and growing demands, municipal governments within the Greater Tokyo Area, with some exceptions, have been reluctant to offer this sort of development permission.



Source: Author's own

Figure 8-14 Vacant Building after Relocation of Large-scale Food Shop

Notwithstanding the out-migration of large-scale facilities, local SMEs in Ome City have survived through self-organising processes, as one representative of the Ome CCI commented:

“In the near future, Toshiba Corporation will close their R&D facility in Ome City, while they already closed their production plant in the form of being consolidated into another plant in Fuchu City (in the inner suburban territory). Before the plant was closed, our local SMEs had strong connections with their activities through outsourcing. However, after the closure of the plant, some local SMEs out-migrated from Ome City in the form of following the consolidation. However, existing local SMEs have begun to search for other marketing channels into the outside of Ome City, being driven by a sense of crisis. Consequently, most of our local SMEs have been successful in diversifying their clients. Therefore, the coming closure of their R&D facility would not seriously damage our local SMEs...Made-to-order is one of recent business streams, so we have tried to provide comprehensive services from upstream to downstream (including maintenance) with use of local SMEs' flexibility and adaptability. Like 'Ome City, Inc.', we are going to work together. We are flexible to proactively look for business opportunities and to expand relevant networks into the outside city.” (Interview No. 34)

In this way, local SMEs have proactively made outward actions into the outside city to expand customer relationships and marketing channels. Therefore, the decline of industrial production in Ome City is mainly caused by the out-migration of large-scale facilities, not by that of local SMEs (Interview No. 34). Simultaneously, it was fortunate that the industrial networks of electronics and/or machinery factories with local SMEs are generally weaker than those of automobile companies (Interview No. 31). Thus, stressing the importance of power balances among Ome City Government, the Ome CCI and the Council for the Revitalisation of Central Urban Districts of Ome City, they have worked together for city revitalisation (Interview No. 44).<sup>11</sup> In fact, the Ome CCI was recently awarded by the Kanto Bureau of METI owing to their

<sup>11</sup> The Council for the Revitalisation of Central Urban Districts is a town management entity consisting of public, private and community sectors, which is established under the Law on Improvement and Vitalisation in City Centre of 1998.

successful outcomes such as the increase in the number of association members (Interview No. 44), while the Hachioji CCI has been experiencing its decrease (Interview No. 14).

In summary, these three cities can be respectively characterised as follows; for Tachikawa City, the growth of high-order service industries and commercial production and lesser impacts of de-industrialisation; for Hachioji City, the decline of industrial and commercial production and greater impacts of de-industrialisation; and for Ome City, greater industrial and commercial decline.<sup>12</sup> In this process, the restructuring of higher mobile actors' capital and/or resources have accelerated economic restructuring within Tokyo's outer suburban territory, triggering the differentiated responses and actions of local economic actors. Thus, there can be observed differences in the thoughts and attitudes of local CCIs among these three cities. In simple terms, these thoughts and attitudes can be characterised as follows: 'openness' for the Tachikawa CCI, 'inwardness' (or independence) for the Hachioji CCI, and 'outwardness' for the Ome CCI.

### **8.3.3 Recent Urban Policies**

#### **a) From the Perspective of Urban and Infrastructure (Re)development**

Tachikawa City has greatly benefitted from upper-level governmental entities' involvements mainly in the policy domain of urban and infrastructure (re)development. The redevelopment of the former US Tachikawa Air Base has brought together the relocation of national- and prefectural-level governmental branches and research institutes mainly in the 1990s. Simultaneously, Tachikawa City has been designated as a regional disaster management centre by upper-level governmental entities. In this process, GOJ-owned public facilities have been consolidated into Tachikawa City, partly due to the necessity of reducing fiscal burdens related to public facility management; for example, a local branch of the Tokyo District Court in Hachioji City, which served as some sort of local identity, was closed to relocate into Tachikawa City (Interview No. 2). This is one example of local-wide locational restructuring in political and administrative terms. From a long-term viewpoint, it can be considered that upper-level governmental entities have gradually shifted a focus from Hachioji City to Tachikawa City. For instance, the former public official of TMG commented that he has the most special feeling to Tachikawa City among suburban municipalities (interview No. 21). Hachioji City had previously led Tokyo's suburban growth and development as the most powerful industrial city under the strong initiative of GOJ. It is easy to imagine that Hachioji City was proud of themselves as the front runner at that time. Other suburban municipalities, including Tachikawa City, seemed envious of Hachioji City, as the public official of Tachikawa City Government commented:

“When I was a young planning officer during suburban growth, I was impressed at the proactiveness of Hachioji City and Hino City in the policy domain of urban and

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<sup>12</sup> Very recently, Tachikawa City faces greater decline in commercial consumption, compared with Hachioji City and Ome City.

infrastructure (re)development. In the past, Hachioji City rigorously implemented district plans, and Hino City implemented land readjustment projects. By contrast, Tachikawa City was not active in urban and infrastructure (re)development at that time.” (Interview No. 29)

However, Hachioji City has recently suffered the retreat of upper-level governmental entities, including the closure of their public facilities. Broadly, whilst TMG will implement a project for Meetings, Incentives, Conferences and Exhibitions (MICE) near JR Hachioji Station, the involvements of upper-level governmental entities have become weaker in Hachioji City over recent decades, compared with Tachikawa City; yet, it is also true that after the redevelopment, Tachikawa City has gradually lost opportunities for upper-level governmental entities’ involvements.<sup>13</sup> In this situation, Hachioji City has been upgraded to the Core City in 2015. Whilst this upgrading does not promise bright futures due to increased social welfare-related responsibilities alongside the widening of discretionary powers, this action itself might show that Hachioji City Government has tried to open their future without much reliance on upper-level governmental entities.<sup>14</sup> Compared with Tachikawa City and Hachioji City, Ome City has not significantly benefitted from TMG, as the public official of Ome City Government commented:

“TMG has not made significant contributions to Ome City, paying attention only to the Special Ward Area. Recently, I was very astonished at the recent long-term vision for Tokyo (announced by TMG in 2015). In this vision, without any consultation with us, Ome City is designated into natural zones in the same way as island municipalities far from our city. The role of TMG is ambiguous for us.” (Interview No. 28)

This designation might implicitly indicate TMG’s intension to make Ome City return to nature under the policy direction of metropolitan-wide compactisation. In my impression, the public officials of Tachikawa City Government and Ome City Government have opposite attitudes and thoughts towards TMG, namely: positive for the former (Interview No. 29) vs. negative for the latter (Interview No. 28). However, while benefitting from upper-level governmental entities’ involvements, Tachikawa City Government has confronted the difficulty of attaining their wishes in the redevelopment of the former US Tachikawa Army Base. That is, it had less controllability in this redevelopment, as the public official of Tachikawa City Government commented:

“For the redevelopment of the former US Tachikawa Army Base, different tiers of government, namely GOJ, TMG, and Tachikawa City Government and neighbouring Akishima City Government, separately prepared redevelopment plans. The intention of GOJ who was the main landowner was very influential, so other governmental entities did not have much powers to engage in plan-making. Even though we appreciate the relocation of some national institutes into Tachikawa City, one problem is that land use in their sites is less intensified without using the FARs to the maximum.” (Interview No. 29)

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<sup>13</sup> TMG plans to develop an industrial exchange centre for MICE in Hachioji City, in which an exhibition hall has an area of about 2.5 thousand square metres (Nikkei, 2017e). Besides, Hachioji City Government has recently attempted to promote MICE projects, establishing the Hachioji Visitors & Convention Association in 2017. Overall, suburban municipalities have been trying to increase exchange population for the promotion of local consumption.

<sup>14</sup> One professor commented the following: “I suggest that Hachioji City should pursue an independent city (without reliance on upper-level governmental entities) at the committee of Hachioji City Government for centre city revitalisation” (Interview No. 10).

This redevelopment process itself shows the difficulty of inter-governmental collaboration, especially for municipal governments, in the top-down political and administrative system of Japan. Moreover, in the situation that GOJ wished to sell part of their lands at the maximum price, one private-sector entity purchased a nearby-station land which is strategically important for Tachikawa City. Consequently, Tachikawa City Government faced a risky situation in which this private-sector entity might implement a self-serving development project. Therefore, Tachikawa City Government has designated district planning codes on this site, which obligate the private-sector entity to develop 'the only one function within Tachikawa City' (Interviews No. 2 & 29).<sup>15</sup> This legal obligation of 'the only one function' is an unprecedented attempt unseen in other cities at that time, which the public officials of Tachikawa City Government had made best efforts to find possible countermeasures which can be taken by municipal governments (Interview No. 2). However, this story itself shows discordance between GOJ and Tachikawa City Government. If critically thinking, Tachikawa City cannot do anything but to ask for 'the only one function within Tachikawa City', not 'the only one function within the Tama Area', although this site would potentially be the best place for entire Tokyo's suburban territory. Therefore, this story also shows that an individual municipal government is difficult to introduce trans-municipal perspectives into their own policy making and implementation.

Differently from Tachikawa City, Hachioji City and Ome City located on the suburban edge have specific policy and planning agendas related to urban and infrastructure (re)development. Over recent decades, all these three cities have substantially reduced public work expenditures to cope with rapidly increased social welfare expenditures. Simultaneously, all of them have struggled with the operation, maintenance and renewal of existing decrepit infrastructures, such as roads and bridges, in the situation that infrastructure optimisation has been increasingly required to minimise relevant fiscal burdens. However, Hachioji City and Ome City with larger administrative areas have more seriously confronted the difficulty of spatial and functional restructuring of these infrastructures, compared with Tachikawa City that is more compact. In this regard, the public official of Hachioji City Government commented:

"Recently, GOJ has facilitated the compactisation of urbanised areas under the compact city strategy. However, it is difficult to straightforwardly suggest this compactisation to all our citizens. Hachioji City experienced a series of administrative annexations, resulting in the creation of locally differentiated areas. Each of these areas has a specific local history and identity. Therefore, it is difficult to apply the compact city strategy in a uniform way to these differentiated areas." (Interview No. 5)

Hachioji City has faced the necessity of responding to local communities' voices widely differentiated due to the past administrative annexations. In this regard, the hugeness of Hachioji City serves as an obstacle under suburban shrinkage. Generally, the bigger cities have

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<sup>15</sup> The public officials of Tachikawa City Government rigorously negotiated with those of the Ministry of Finance, and then persuaded them about the setting of district planning codes on the site, because these codes which create development constraints tend to depreciate bidding prices from private-sector entities (Interview No. 29).

more powers with more fiscal capacities especially under suburban growth, but they would face new suburban realities in the context of shrinkage. This phenomenon can also be observed in Ome City. In this respect, economic infrastructures are more difficult to abandon, compared with social infrastructures (except for elementary and junior high schools), as the public official of Ome City Government commented:

“Ome City has been suffering the maintenance and operation costs of existing public infrastructures and buildings developed during suburban growth. Under the compact city strategy, we have been working for their optimal restructuring. However, due to the difficulty of reaching consensus with local communities, it is harder to dismiss public infrastructures such as roads and bridges (economic infrastructures), compared with public buildings (social infrastructures). Even if public buildings would be restructured, public work expenditure would not be reduced without the restructuring of public infrastructures that have vastly expanded. One problem is that we cannot use the revenue generated from city planning tax for this sort of infrastructure operation and maintenance (under the current legal system).<sup>16</sup>” (Interview No. 30)

It is assumed that infrastructure restructuring by public-sector entities tend to be delayed against the swifter retreats of private-sector entities, resulting in the increased inefficiency of infrastructure functioning. This is relevant especially to suburban fringe areas. As such, Hachioji City and Ome City would delay the functional and spatial optimisation of existing infrastructures in a timely manner, resulting in more pressures on their fiscal conditions. In some sense, it can be considered that Hachioji City and Ome City have been puzzled by the idealised concept of the compact city, facing the difficulty of ‘smart shrinkage’ that has become one of common policy and planning terms against ‘smart growth’.

Alongside their attempts to abandon existing infrastructures, Hachioji City and Ome City have tried to develop new industrial parks alongside the MIE for economic revitalisation. In this regard, the public official of Ome City Government commented:

“Even if we would like to attract industries, we do not have large-scale available lands in our city. Therefore, we plan to develop a logistics centre alongside the MIE. However, a planned site for this development, which is located within the UCAs, is currently used as agricultural lands. Therefore, it is necessary to rezone it into the UPAs for this development. However, the agriculture-related administrative section of the Bureau of Industrial and Labour Affairs of TMG does not easily agree with this rezoning, even though the Bureau of Urban Development of TMG has already accepted that this site would be developed as a logistics centre.<sup>17</sup> It is because these consolidated agricultural lands are rare within Tokyo Metropolis.” (Interview No. 31)

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<sup>16</sup> It would be considered that GOJ is slow to change legal and institutional systems for shrinking municipalities under the situation that there have existed both growing and declining municipalities across the nation.

<sup>17</sup> New political and policy conflicts and tensions have emerged in suburban fringe areas. These are complex to incorporate both inter-governmental and inter-sectoral dynamics. Phelps (2012a: 677)’s “economic growth versus conservation” can be observed between the urban and infrastructure (re)development administrative sections of a municipal government and the industrial and commercial administrative sections (agricultural preservation) of TMG. Phelps (2012a: 677)’s “governmental amalgamation or secession” can be observed even within the singular policy domain of urban and infrastructure (re)development of a municipal government, namely infrastructure abandonment vs. new infrastructure development.

The policy domain of urban and infrastructure (re)development had taken the lead role in municipal-level public affairs during suburban growth. Alongside the necessity of infrastructure restructuring, urban and infrastructure (re)development projects have still been planned under the slogan of economic revitalisation. Simultaneously, urban and infrastructure administrative sections still have a fixed way of thinking about functions to be induced, attempting to attract the same functions as the past, such as production plants, R&D facilities and logistics centres. Besides, they would still have a strong sense of being the main player possessing influential powers in municipal-level public affairs, possibly based on with the remembrance of the past.

#### **b) From the Perspective of Social Welfare Improvement**

As for the policy domain of social welfare improvement, all of Tachikawa City, Hachioji City and Ome City have suffered the rapid increases of social welfare expenditure, while this tendency can be more severely observed in Hachioji City and Ome City. This increase has been burdensome enough to restrict flexibility in their governmental operations, including constrained actions for industrial and commercial promotion. However, causal relationships about social welfare burdens are differentiated among these three cities. Whilst Hachioji City and Ome City have suffered social welfare burdens due to population aging, relatively prosperous Tachikawa City has suffered social welfare burdens due to increased public assistances for low-income people (Interview No. 24). Hachioji City and Ome City located on the suburban edge have struggled for the increased, isolated elderly, as the public official of Hachioji City Government commented:

“In Hachioji City, private-sector recreation facilities, which had actively been constructed in fringe areas during suburban growth, have recently tended to be converted into elderly care facilities. Hachioji City Government has come to recognise a necessity of elderly care around 2005. Recently, our public affairs associated with elderly care have stressed more localisation in alignment with GOJ’s policy direction about the ICCS. In this vein, we have attempted to establish a more fruitful system by increasing the number of localised elderly care management centres which should be allocated within each area with a radius of approximately five hundred metres. We have made public invitations to private-sector companies for the construction and operation of these facilities. However, we have struggled to attract them, because these businesses in the Tama Area are less profitable than those in Special Ward Area. These private-sector companies have faced the difficulty of finding labour forces in the Tama Area, because young generations are inclined to work in white-colour service industries in the Special Ward Area and reluctant to work in blue-colour elderly care industries in the Tama Area...Moreover, there is a contradiction between GOJ and TMG in policy arrangements. GOJ already transferred financial resources (for the development of elderly care facilities) to TMG. However, TMG has stressed regional-wide facilities rather than local-wide facilities. Consequently, we have faced fewer opportunities of receiving subsidies from TMG to develop localised elderly care facilities which we wish to develop.” (Interview No. 17)

In this way, GOJ’s policy about the ICCS has substantially affected municipal governments’ actions for elderly care, resulting in the narrowing of their perspectives and scopes mainly for social welfare.

In addition to population aging, municipal governments have faced population decline. Alongside the decrease in the number of children, most municipal governments have attempted to restructure elementary and junior high schools. In this respect, Hachioji City and Ome City have been struggling for consensus building about the elimination and consolidation of schools especially within traditional communities-dominated areas, as the public official of Hachioji City Government commented:

“Most elementary and junior high schools in Hachioji City were constructed in the 1970s and 1980s.<sup>18</sup> Now, we need to eliminate and consolidate these schools, especially those in fringe areas.<sup>19</sup> From an educational viewpoint, smaller classes tend to offer a low-quality level of education, because smaller classes cannot offer a wider variety of opportunities than larger classes. In the future, the consolidation between one (or two) elementary school and one junior high school would be a possible option, maintaining each school district within the walking sphere. However, it is difficult to promote the elimination and consolidation of schools due to the difficulty of consensus building with local residents, especially in traditional communities-dominant areas. Hachioji City has experienced the administrative annexes of different towns and villages, resulting in a mixture of traditional settlements and newly developed housing areas. Traditional communities tend to strongly disagree with the elimination and consolidation of schools, since they have regarded schools (in which they grew up) as important local identities. They tend to oppose even the changes of school names. By contrast, it is easier to promote the elimination and consolidation of schools in newly developed housing areas (e.g. within TNT), since newcomer communities do not show strong expressions of disagreement.” (Interview No. 20)

The same tendency is observed in Ome City (Interview No. 32). Yet, this sort of struggle is less relevant to Tachikawa City, whilst the same tendency is observed in traditional communities-dominated areas (Interview No. 23). Presumably, this situation indicates a failure of Perry (1929)’s “Neighbourhood Theory” in (sub)urban shrinking processes. This theoretical planning model would be more beneficial in (sub)urban expansion processes, but it cannot be simply applied under suburban shrinkage. Besides, ironically, the increased importance of democratic planning and community participation has delayed municipal governments’ actions for school restructuring. Even if municipal governments attempt to convert schools (with decreased demands) into elderly care (and/or childcare) facilities (with increased demands), they cannot smoothly complete this sort of conversion. For instance, timing differences between the renewal of schools and the development of elderly care (and/or childcare) facilities serves as an obstacle (Interview No. 25). This would be partly because schools and elderly care (and/or childcare) facilities are separately taken charge of by different administrative sections. As such, the delayed restructuring of social welfare facilities would result in a failure to timely reduce social welfare burdens on municipal governments.

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<sup>18</sup> Hachioji City Government prioritised seismic strengthening works and completed most of them until around 2010. For these works, it is relatively easy to receive subsidies from GOJ (Interview No. 20).

<sup>19</sup> The public officials of Hachioji City Government commented the following: “while Hachioji City Government has tried to co-integrate public facilities, such as childcare facilities and lifelong learning facilities, into schools, it is difficult to obtain subsidies from GOJ (Interview No. 20). This co-integration is considered one countermeasure under suburban shrinkage. However, the public official of Ome City Government commented that it would be not desirable to install other facilities into schools, since this would hinder children’s concentration on studies (Interview No. 32). Teachers who are keen to the quality of the educational environment seem opposed to this countermeasure.



Differently from Tachikawa City and Hachioji City, Ome City has already started to face the decline of young families with children (Interview No. 28). Therefore, the re-attraction of young generations and improvement of childcare environments have come to the fore as one of the top political and policy agendas (Interview No. 28).<sup>20</sup> Thus, Ome City Government has eagerly promoted collaborations with local NPOs and communities, as one representative of the NPO that have worked for the improvement of childcare environments commented:

“Our childcare activities were initiated by newcomers coming from the outside of Ome City. I moved into Ome City in the 1980s when my husband started to work for a newly opened factory of a large-scale manufacturing company and live in their company housing. At that time, our city was left behind in terms of childcare environments, as observed in the fact that there were no public-sector childcare facilities in Ome City. Therefore, we spontaneously began our activities in the early 1990s without any governmental supports by renting a small room. I think that the most important factor which enabled us to begin our activities is that we could look at the at-that-time situation of our city as outsiders and notice the low quality of childcare environments...Whilst taking much time to establish our relationship with Ome City Government, our importance has been increasingly recognised. The important event for us is that Ome City Government has begun public-private cooperative projects since the early 2000s. Now, we have steadily deepened mutual relationships to generate co-benefits. While being difficult for Ome City Government to strengthen supportive measures under the increasingly limited fiscal condition, I hope that Ome City Government can become more proactive.” (Interview No. 40)

Since Hachioji City has not yet seriously faced the out-migration of young generations, their re-attraction has not yet come to one of the top policy priorities to the same extent as Ome City. Yet, Hachioji City has also tried to maintain young people by improving childcare environments, as the public official of Hachioji City Government commented:

“The improvement of childcare environments is important to prevent the out-migration of young families and maintain multi-generational diversities. Therefore, we are trying to reduce the number of children on waiting lists for entering kindergartens. Information sharing between public and private sectors is important, because I could successfully reduce the number of waiting children after I began to proactively share information with private-sector entities. By improving childcare environments, we expect that the number of young families with children, as well as fertility rates, will increase.”<sup>21</sup> (Interview No.18)

Whilst population decline and aging have been less relevant to Tachikawa City, the public official of Tachikawa City Government has stressed the importance of the educational environment, as follows:

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<sup>20</sup> For details, see Ome City Government (2016) in comparison to Tachikawa City Government (2015) and Hachioji City Government (2012).

<sup>21</sup> The increase in fertility rates is difficult to be achieved only by municipal governments. However, they have increasingly made efforts for this increase. The public official of Hachioji City Government examines differences in fertility rates among suburban municipalities. Thus, he commented the following: “suburban municipalities with more low-income households have showed higher fertility rates. However, lower-income households have tended to make lesser contributions to municipal tax revenue” (Interview No. 18). This contradictory evidence would indicate some difficulties in municipal-level policy making and implementation.

“Tachikawa City is trying to improve the quality of basic education at elementary and junior high schools.<sup>22</sup> The educational environment is important to attract young families with children, because it serves as one of the main criteria in locational choices for their residences.” (Interview No. 24)

Alongside increased efforts for elderly care, the improvement of childcare and educational environments has been increasingly considered important. Simultaneously, depending on their socio-demographic trends, there have emerged differences in policy prioritisation among these three cities.

### **c) From the Perspective of Industrial and Commercial Promotion**

As for the policy domain of industrial and commercial promotion, Tachikawa City, Hachioji City and Ome City have taken different actions depending on economic trends, under the overall situation that this policy domain has been less prioritised when compared to the other two policy domains. Tachikawa City, Hachioji City and Ome City are respectively characterised by ‘openness’, ‘inwardness (or independence)’ and ‘outwardness’, which correspond to the aforementioned different thoughts and actions of their CCIs. These different thoughts and actions are reflected by differences in the conditions of their local ordinances for industrial attraction, which have tended to be enacted since the 2000s. Firstly, Hachioji City Government has been eager to withhold existing industries within the large administrative area, as the public official of Hachioji City Government commented:

“In Hachioji City, industrial land use has gradually been converted into residential land use, especially within semi-industrial land use zones. However, our local ordinance for industrial attraction has provided incentives, such as tax relaxation and subsidies, to manufacturing companies seeking for larger lands for their renovation or extension if they intend to relocate within our administrative area. Our local ordinance has been relatively successful in withholding existing manufacturing companies within our city.” (Interview No. 7)

In this case, the largest administrative area of Hachioji City serves to offer more land alternatives for the intra-city relocation of existing manufacturing industries. This is one favourable aspect of giant Hachioji City. In contrast, Ome City Government has struggled to avert the out-migration of existing large-scale manufacturing facilities and promote the in-migration of new large-scale industries, due to the lack of industrial lands (Interview No. 31). Therefore, Ome City Government has tried to support the outward actions of local SMEs by establishing the local ordinance that provides relatively comprehensive incentive packages (Interview No. 31), as the public official of Ome City Government commented:

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<sup>22</sup> From the viewpoint of the standard scores of metropolitan high schools by TMG, the educational level of Hachioji City was previously higher than that of Tachikawa City, however this has turned inside out now. One emeritus professor commented the following; “the educational level is important to attract young families with children. Ome City is comparatively lower in this level” (Interview No. 6).

“Whilst the production plant of Toshiba Corporation already out-migrated, their R&D facility will close soon.<sup>23</sup> Yet, we need to work for local SMEs rather than large-scale companies. This is our role as a municipal government. We have recently offered a wider range of supports for local SMEs, including those for R&D activities, compared with neighbouring municipal governments...The closure of the R&D facility of Toshiba Corporation does not have much harmful impacts on local SMEs in our city. It is because electronic companies have weaker ties with local SMEs, compared with automobile companies with strong ties with local SMEs as subcontractors.<sup>24</sup> The decline of manufacturing production in our city has been caused mainly by the out-migration of large-scale companies, not by the decrease in the manufacturing production of local SMEs.” (Interview No. 31)

This industrial and commercial policy of Ome City has been closely linked with the aforementioned self-organising processes of local SMEs in collaboration with the Ome CCI. Regarding this, one deputy manager of the Ome CCI has stressed the importance of clear role sharing between municipal governments and local CCIs (Interview No. 44).

Differently from Hachioji City and Ome City, Tachikawa City does not have any local ordinance for industrial attraction, because private enterprises have spontaneously in-migrated even without governmental incentives (Interview No. 9). However, Tachikawa City has faced the difficulty of envisioning the future (Interview No. 24). It is because Tachikawa City as the ‘City of Commerce’ has recognised that ongoing suburban shrinkage in neighbouring cities would damage their economic prosperity in the future (Interview No. 24). Seeking for future visions, Tachikawa City Government, as well as the Tachikawa CCI, has tried to keep their city open to everyone (Interviews No. 13 & 24). In this vein, Tachikawa City Government has been pursuing a start-up city that can serve as an intermediate place of business development, as the public official of Tachikawa City Government commented:

“Tachikawa City has faced the difficulty of envisioning the future, while seeking for the next vision. Under this situation, Tachikawa City Government has recently considered the strategy of creating a place of business entrepreneurship. We assume specific processes in which business entrepreneurs will launch their businesses (with smaller initial investments) in our city, and then successful entrepreneurs will subsequently move into the metropolitan city centre for their business expansion. In this process, Tachikawa City can serve as some sort of an intermediary. This strategy can make our city adaptable to future economic restructuring by promoting business entrepreneurship (and stressing the initial stage of business development), which will emerge in response to new, ever-changing market demands. According to our survey, most people do not have any particular impressions about our city. Therefore, we are trying to use this unfixed image (about our city) as an underhanded way for a place of start-ups, attempting to be welcome to everyone. However, at the current stage, most users of our business incubation facility are NPOs (rather than business incubators).” (Interview No. 24)

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<sup>23</sup> Other out-migrated companies include Casio Micronics Co., Ltd. for electronic goods and Hitachi, Ltd. for semiconductors.

<sup>24</sup> The public official of Ome City Government commented the following; “I received a call from Kure City Government in Hiroshima Prefecture, which will suffer the closure of a production plant of Mitsubishi Motors Corporation. They asked me about subsequent consequences in our city after the closure of the production plant of Toshiba Corporation” (Interview No. 31).

In these ways, Tachikawa City, Hachioji City and Ome City have taken different actions in the policy domain of industrial and commercial promotion, depending on their different trajectories. Municipal governments have tended to be confined to their administrative areas (Interview No. 45). Yet, presumably, the outward actions of local SMEs into external markets would come to be more prominently observed in accordance with the progress of suburban shrinkage, as seen in Ome City. However, the timings of these outward actions might be too late for each suburban municipality to prevent further economic decline. Moreover, the individual efforts of each municipal government would be insufficient to satisfactorily accelerate these outward actions to wider markets, due to the lack of information, know-how and networks outside of each city.

#### **8.4 Reflecting Different Trajectories of Tachikawa City, Hachioji City and Ome City: Local Differentiations of Metropolitan-wide Three I's Dynamics**

Tachikawa City, Hachioji City and Ome City have experienced different trajectories in terms of the three P's, as discussed in Chapter 6. Exploring underlying mechanisms, these three cities have incorporated different inter-governmental, inter-sector and inter-actor dynamics, as summarised in Table 8-1. That is, their multi-dimensional differentiations of the three P's have been materialised by local differentiations of the metropolitan-wide three I's dynamics discussed in Chapter 7. Here, it should be remembered that these differentiations have taken place under the overall process of 'suburban balkanisation'. The locational restructuring of both greater and lesser mobile actors has been reflected in the relationship between the three P's and three I's. That is, the consequences of their locational restructuring have reflected by the three I's dynamics of each of these three cities. In this process, the metropolitan-wide locational restructuring of greater mobile actors has made great impacts on some parts of the three I's dynamics, which are related to upper-level governmental entities and global economic actors. Then, this metropolitan-wide locational restructuring has accelerated the local-wide locational restructuring of lesser mobile actors, which has been reflected in other parts of the three I's dynamics related to municipal governments, local economic actors and local non-economic (or social) actors. Thus, the local-wide locational restructuring has also led to widening the multi-dimensional differentiations among these three cities, serving as one of the key layers of multi-layered locational restructuring.

In summary, the following can be observed from the perspective of each of the three I's. Firstly, from the perspective of inter-governmental dynamics, these three cities have been positioned in quite different inter-governmental dynamics, especially in the policy domain of urban and infrastructure (re)development. In recent decades, the extent of upper-level governmental entities' involvements, especially TMG, can be considered in the following order: Tachikawa City (higher), Hachioji City (moderate) and Ome City (lower) under the process of 'choice/selection and focus/concentration' or being "strategically selected" (Phelps, 2010: 74). This differentiated

extent of their involvements has served as the key driver that creates the different trajectories of Tachikawa City, Hachioji City and Ome City.

Secondly, from the perspective of inter-sectoral dynamics, all these three cities have suffered social welfare burdens even with different causal relationships, and worried about infrastructure management, resulting in less capacities for industrial and commercial promotion. In simple terms, all of them would still be reactive in the policy domain of industrial and commercial promotion. Simultaneously, different thoughts and actions, which would affect inter-actor dynamics, have emerged in the policy domain of industrial and commercial promotion. That is, Tachikawa City, Hachioji City and Ome City can be respectively characterised by 'openness', 'inwardness (or independence)' and 'outwardness'. Yet, if critically thinking, the 'openness' of Tachikawa City would be considered reactive, or defensive, to wait for new entrants; this attitude and thought would be observed for most suburban municipalities during suburban growth. Notably, the economic prosperity of Tachikawa City has been actualised by upper-level governmental entities' involvements through the policy domain of urban and infrastructure (re)development, rather than municipal-level efforts in the policy domain of industrial and commercial promotion. By contrast, the 'outwardness' of Ome City seeking for wider economic linkages would be considered more proactive. However, the emergence of real proactivity for industrial and commercial promotion would need to be waited until economic shrinkage would be seriously recognised. Yet, this timing would be too late to prevent the rapid progress of suburban economic shrinkage, and more trans-municipal perspectives and scopes for industrial and commercial promotion would be required at the earlier stage.

Finally, from the perspective of inter-actor dynamics, these three cities have faced the differentiated conditions of linkages between global and local economic actors and those between newcomer and traditional communities. In short, Tachikawa City has experienced a renewing of these linkages due to the in-migration of global economic actors and newcomer communities. Hachioji City has still maintained relatively stable linkages among these actors, alongside the intra-city migration of some actors. Ome City has experienced a weakening of these linkages due to the out-migration of global economic actors and newcomer communities. In this way, inter-actor linkages in both economic and non-economic (or social) terms have been differentiated among these three cities. Here, it should be noted that linkages between newcomer and traditional communities have tended to be strengthened at the early stage of suburban shrinkage in the situation that municipal governments have made best efforts to collaboratively work with them, as observed in Ome City. However, it is considered that these inter-actor linkages would possibly continue to be weakened for all the three cities, unless continued suburban shrinkage would be prevented.

Table 8-1 Characteristics of Tachikawa City, Hachioji City and Ome City  
from the Perspective of Three I's

		Tachikawa City	Hachioji City	Ome City
Overall Trend		Growth	Stagnation	Decline
Three P's Anatomical Framework	Socio-demographic (Population)	Population growth	Population growth	Population decline
	Economic (Production)	Employment growth (high-order service industries)/ lesser production decline	Employment growth (social welfare industries)/ moderate production decline	Employment decline and greater production decline
	Political and Administrative - Fiscal (Policy)	Greater growth of municipal tax revenue	Lesser growth of municipal tax revenue	Decline of municipal tax revenue
Three I's Anatomical Framework	Inter-governmental Dynamics		Greater involvements of upper-level governmental entities	Moderate involvements of upper-level governmental entities
			Lesser involvements of upper-level governmental entities	
	Inter-sectoral Dynamics		<ul style="list-style-type: none"> <li>• Benefits from upper-level government entities-led redevelopment (limited control powers of Tachikawa City Government)</li> <li>• In-migration of national- and prefectural-level governmental branches and research institutes</li> </ul>	<ul style="list-style-type: none"> <li>• Suffering from the retreat of upper-level governmental entities (but some involvements of TMG for MICE projects)</li> <li>• Increased extent of independence through being upgraded to the Core City</li> </ul>
			<ul style="list-style-type: none"> <li>• Suffering from the lack of proactive involvements of upper-level governmental entities</li> <li>• Classified into natural zones in the long-term vision for Tokyo (announced in 2015 by TMG)</li> </ul>	
	Inter-actor Dynamics		Openness (for industrial and commercial promotion)	Inwardness (or independence) (for industrial and commercial promotion)
			<ul style="list-style-type: none"> <li>• No local ordinance to provide incentive packages for industrial attraction</li> <li>• Lesser suffering from social welfare and infrastructure issues, but increased expenditures for publicly assisted people</li> <li>• Difficulty of envisioning the next pathway after the 'City of Commerce' and pursuit of a start-up city open to everyone</li> </ul>	<ul style="list-style-type: none"> <li>• Local ordinance to support intra-municipal relocations of manufacturing industries</li> <li>• Greater suffering from social welfare and infrastructure issues</li> <li>• Difficulty of spatial and functional restructuring of infrastructures and educational facilities due to widely differentiated local contexts</li> </ul>
	Inter-actor Dynamics	Economic actors (global / local)	<ul style="list-style-type: none"> <li>• Open-minded thoughts and actions of the local CCI</li> <li>• Possible interactions for new business entrepreneurship</li> </ul>	<ul style="list-style-type: none"> <li>• Flexible and adaptable system of the local CCI</li> <li>• Out-migration of large-scale production plants and R&amp;D facilities (triggering the out-migration of local economic and non-economic actors)</li> <li>• Outward actions of local SMEs through self-organising processes</li> </ul>
		Non-economic (or social) actors (newcomer/ traditional)	<ul style="list-style-type: none"> <li>• Renewed, but possibly strengthened or weakened</li> <li>• Out-migration of middle-income young families into neighbouring cities</li> <li>• Out-migration of young singles into the urban territory</li> <li>• In-migration of low-income people</li> <li>• Out-migration of the elderly into Ome City</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthened, but facing a risk of being weakened</li> <li>• Out-migration of young generations into neighbouring cities (especially childbearing families rooted in newcomer communities)</li> <li>• In-migration of the elderly</li> <li>• Better community collaboration (but facing a risk of being weakened due to socio-economic shrinkage)</li> </ul>
	Inter-actor Dynamics		Renewed	Relatively stable
			<ul style="list-style-type: none"> <li>• Traditional hierarchical system of the local CCI (but increased isolation from other local CCIs)</li> <li>• Intra-municipal migration of existing industries</li> <li>• Closure of large-scale department stores</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthened, but still strong existence of traditional communities</li> <li>• Intra-municipal migration of young generations</li> <li>• Out-migration of university students into the urban territory</li> <li>• Existence of traditional communities with strong ties</li> <li>• Better community collaboration (still stable before facing socio-economic shrinkage)</li> </ul>
	Inter-actor Dynamics		Renewed, but possibly strengthened or weakened	Strengthened, but facing a risk of being weakened
			<ul style="list-style-type: none"> <li>• Out-migration of middle-income young families into neighbouring cities</li> <li>• Out-migration of young singles into the urban territory</li> <li>• In-migration of low-income people</li> <li>• Out-migration of the elderly into Ome City</li> </ul>	<ul style="list-style-type: none"> <li>• Out-migration of young generations into neighbouring cities (especially childbearing families rooted in newcomer communities)</li> <li>• In-migration of the elderly</li> <li>• Better community collaboration (but facing a risk of being weakened due to socio-economic shrinkage)</li> </ul>

Source: Author's own

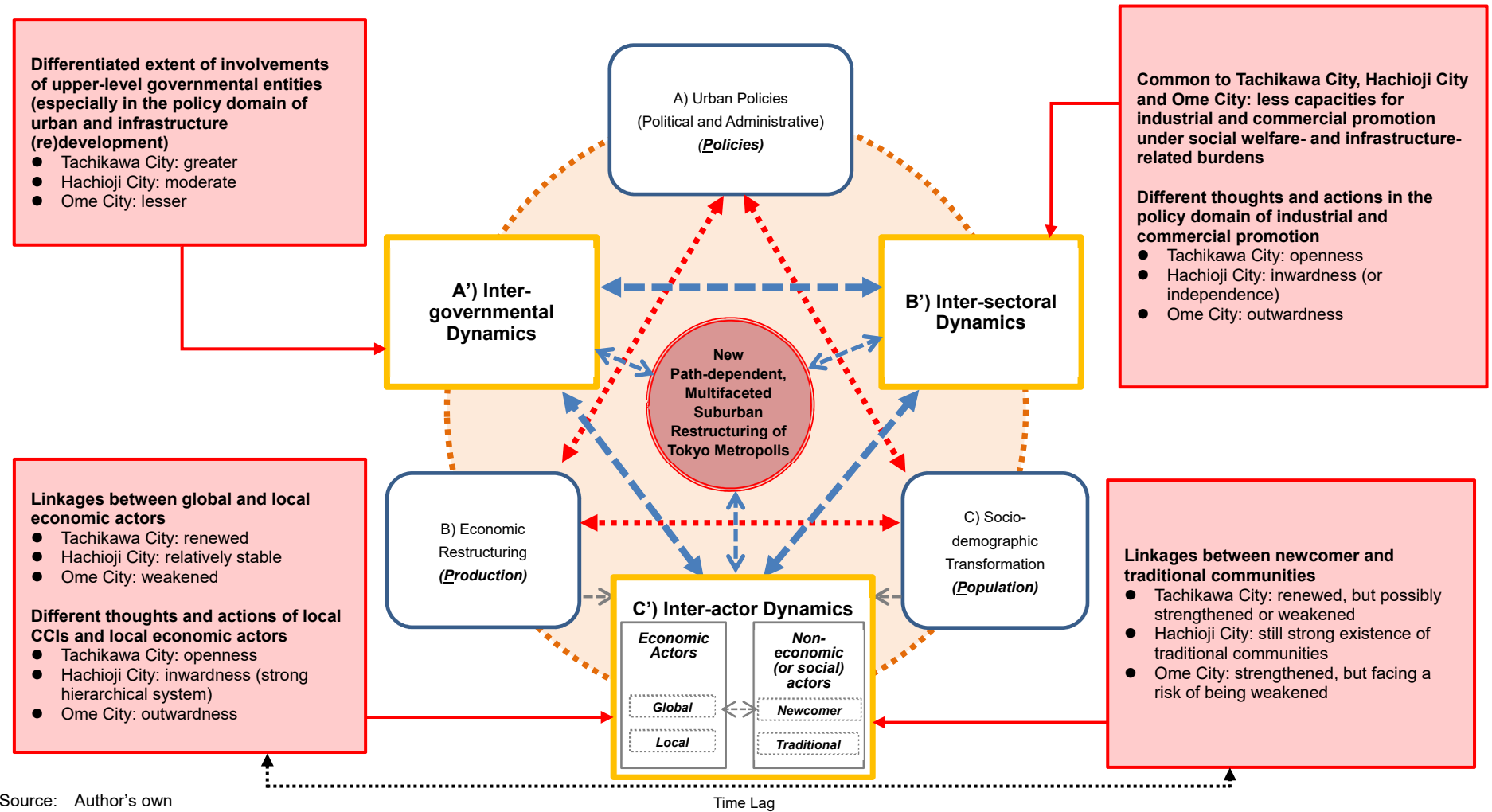


Figure 8-15 Local Differentiations of Metropolitan-wide Three I's Dynamics for Tachikawa City, Hachioji City and Ome City

## **8.5 New Horizons of Inter-municipal Collaboration under Suburban Shrinkage**

### **8.5.1 Increased Difficulty for Inter-municipal Collaboration**

Current suburban shrinkage has generated new types of obstacles for inter-municipal collaboration, while Tokyo's suburban territory has fallen into a vicious cycle of suburban shrinkage that cannot be escaped only by individual efforts of each suburban municipality. The multi-dimensional divergence among key outer suburban municipalities has increasingly differentiated policy and planning agendas and priorities among them, resulting in the difficulty of inter-municipal collaboration. Apart from this obstacle, there have newly emerged other obstacles for inter-municipal collaboration, most of which would be specific to suburban shrinkage. These are as follows: 1) the increased difficulty of setting visions and strategies to be shared among suburban municipalities, 2) weakened self-motivation for inter-municipal collaboration due to growing stickiness to existing capital and/or resources, 3) non-existence of leading affluent suburban municipalities capable of caring about neighbouring municipalities, and 4) traditional conflicts and tensions among major suburban municipalities.

First, as discussed in Chapter 7, Tokyo's suburban territory has faced the magnified ambiguity of its positioning within the wider context (Interview No. 2). This has made it difficult to set up future visions and strategies that can be shared among suburban municipalities, especially in the outer suburban territory (Interview No. 2). This lack of common visions and strategies has made inter-municipal collaboration more difficult.

Second, suburban municipalities' self-motivation for inter-municipal collaboration has been increasingly weakened under the narrowing of their perspectives and scopes. Suburban shrinkage has forced each suburban municipality to stick to, or treasure, existing capital and/or resources (Interview No. 35), in the situation that the accumulation of new capital and/or resources is less expected. Suburban municipalities have tried to re-evaluate their existing capital and/or resources for maximum utilisation and understand their distinctiveness from other suburban municipalities for city revitalisation.<sup>25</sup> In reality, inter-municipal collaboration under suburban shrinkage would increasingly require functional sharing among suburban municipalities. In this sharing, some facilities of "Yes In My Back Yard" (YIMBY) would need to be abandoned. Even though each suburban municipality has recently attempted to optimise

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<sup>25</sup> Ome City has attempted to use forestry and agricultural resources for tourism promotion. The public official of Ome City Government commented the following; "woods in our mountains are not competitive against imported woods. Although some landowners make the offers of donating their mountains to Ome City, we cannot purchase them because of no use value. The Bureau of Industrial and Labour Affairs of TMG have considered that forestations in these mountains have no potential to create profitable businesses. However, the Bureau of Environment of TMG has purchased some lands from landowners for forestry preservation and pollen-allergy prevention, and sold them to some enterprises that have operated the 'Groves of the Corporate' as one activity for Corporate Social Responsibility. While forestry resources are not currently used for tourism promotion, we have begun to consider about this utilisation and start data collection" (Interview No. 31). In the situation that Ome City Government has been trying to utilise agricultural resources, one professor commented that Ome City should try to be an agricultural-based business city as a unique type of the BCCs (Interview No. 3).



existing YIMBY facilities for their own sake, it has been reluctant to abandon these facilities for other suburban municipalities. Since the period of suburban growth, suburban municipalities have cooperatively shared some facilities of “Not In My Back Yard” (NIMBY).<sup>26</sup> However, they cannot cooperatively work for the functional sharing of YIMBY facilities, as the public official of Ome City Government working for the Ome Municipal General Hospital commented:

“The Ome Municipal General Hospital, as the main hospital in the Nishi-tama Area, receives many patients from the outside city (who are not taxpayers for our city), whilst this hospital has been operated mainly by the tax revenue of our city.<sup>27</sup> This is a problem of benefiteres. Although functional sharing with other hospitals in neighbouring cities would be necessary, it is difficult to do so. It is because neighbouring cities wish to maintain a relatively full set of medical services.” (Interview No. 35)

Third, there does not exist municipal governments that can proactively lead inter-municipal collaboration under suburban shrinkage. Some inter-municipal collaborations during suburban growth were carried out by the initiatives of affluent suburban municipalities (Interview No. 42). However, every municipal government under suburban shrinkage has been desperate to care about their own city, and has no room to attention other cities (Interview No. 42).

Fourth, some traditional conflicts and tensions have obstructed inter-municipal collaboration. For example, there previously existed the Tachikawa-Hachioji war (Interview No. 37). Now, the relationship between Tachikawa City and Hachioji City has turned inside out within Tokyo's outer suburban territory. Consequently, some hostile sentiments between Hachioji City and Tachikawa City might hinder the promotion of inter-municipal collaboration, as the former public official of TMG commented:

“Inter-municipal collaboration necessitates win-win relationships among suburban municipalities. One difficulty for this sort of collaboration is that large suburban municipalities which are comparatively autonomy-minded, traditional and/or prosperous (such as Tachikawa City, Hachioji City, and Ome City) are reluctant to collaborate, whilst small suburban municipalities would wish for collaborations. For example, Hachioji City has a long history with the traditional group of rich masters as famous localities.<sup>28</sup> Therefore, Hachioji City regards Tachikawa City as the newest rich or nouveau riche.” (Interview No. 21)

In these ways, suburban shrinkage has created new types of obstacles that have interactively impeded inter-municipal collaboration, while these obstacles had not been observed during suburban growth. Consequently, inter-municipal collaboration has become more difficult to be achieved only by municipal governments without any involvements of upper-level governmental

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<sup>26</sup> As for the examples of NIMBY facilities, suburban municipalities had co-operated a regional-wide waste disposal facility in Hinode Town. The land fill for waste disposal had been conducted during 1984 to 1998.

<sup>27</sup> The same public official of Ome City Government commented the following; “from the viewpoint of hospital management, it is better to concentrate on highly advanced medical treatments rather than general medical treatments. It is because the former would generate more earnings than the latter, partly due to the current medical insurance system. However, if making more shifts towards highly advanced medical treatments, more distances to general patients would be created, resulting in a failure to serve as a pivotal hospital for the ICCS. This is our dilemma” (Interview No.35).

<sup>28</sup> In Hachioji City, there still exist traditional female entertainers working as hostesses.

entities.<sup>29</sup> Yet, TMG has not been eager to promote inter-municipal collaboration within Tokyo's suburban territory (Interview No. 42).

### 8.5.2 Increasingly Intertwined Futures among Suburban Municipalities

Alongside newly emerged obstacles for inter-municipal collaboration, outer suburban municipalities have increasingly become aware of their intertwined futures. Even growing Tachikawa City has already anticipated future sufferings under the rapid progress of suburban decay, as the public official of Tachikawa City Government commented:

“Tachikawa City has enjoyed prosperity as the ‘City of Commerce’. Many people from the outside city now visit our city for shopping. However, we are concerned about the future of our city, since the overall decline of surrounding suburban municipalities will inevitably result in the diminishment of our commercial consumption. Therefore, the future prosperity of surrounding suburban municipalities is important to our city.” (Interview No. 24)

In turn, declining Ome City has also recognised the importance of Tachikawa City for their future, as the public official of Ome City Government commented:

“We recognise that Tachikawa City is the most key city in the future Tama Area. The future of Tachikawa City is important to Ome City, since its prosperity will benefit us. Our proximity to Tachikawa City enables our local residents to commute to there. However, we do not have many collaborations with Tachikawa City.” (Interview No. 28)

The key municipalities of Tokyo's outer suburban territory have noticed their intertwined futures under suburban shrinkage, whilst they had harshly competed with one another during suburban growth. Nevertheless, inter-municipal collaboration has increasingly become difficult due to the newly emerged obstacles described above. This contradiction would be one of suburban dilemmas in the context of shrinkage. However, this sense of interdependence among suburban municipalities would undoubtedly be the key to generating new modes of inter-municipal collaboration for suburban economic development.

Interestingly, there have very recently emerged new movements of inter-municipal collaboration. In February 2017, a symposium for future inter-municipal collaboration, the so-called Wide-area Collaboration Summit 2017, was held in Tachikawa City.<sup>30</sup> The members of this symposium consisted of Tachikawa City and eight cities, namely Akishima City, Kodaira City, Hino City, Kokubunji City, Kunitachi City, Fussa City, Higashiyamato City, and Musashimurayama City (Nikkei, 2017a). The mayors of these cities gathered to discuss about future inter-municipal

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<sup>29</sup> According to an information talk, the former public official of TMG comments the following; “TMG needs to respect the spontaneous actions of suburban municipalities, because inter-municipal collaboration has historically been promoted by the initiatives of key suburban municipalities”. Yet, it is probable that this way of thinking has also hindered the proactivity of TMG for the promotion of inter-municipal collaboration.

<sup>30</sup> According to an informal talk, the next summit will be held to discuss about tourism promotion.

collaboration with use of big data in collaboration with the Institute of Statistical Mathematics (ISM) established under MEXT. The ISM is one of national research institutes relocated into Tachikawa City through the redevelopment of the former US Tachikawa Air Base. This relocation has invoked some interactions between Tachikawa City Government and the ISM (Interview No. 29), in which Tachikawa City made an agreement of collaboration with the ISM to utilise big data for the improvement of public affairs in 2016. However, an attempt for inter-municipal collaboration of this sort is not the first time, as the public official of Tachikawa City Government commented:

“About ten years ago, Tachikawa City and neighbouring cities sought for inter-municipal collaboration. For instance, Tachikawa City attempted to carry out the inter-municipal operation of community buses beyond our administrative boundaries. However, the final problem is ‘who will pay for which parts?’. Whilst there exist the guidelines or rules of cost sharing for some legitimated project schemes such as an inter-city railway elevation project, there exist no guidelines or rules for inter-municipal collaboration of this sort. Therefore, concrete, fruitful outcomes almost came to naught at that time...For the Wide-area Collaboration Summit 2017, the current mayor of Tachikawa City called to mayors of neighbouring cities. In my view, he becomes more confident because he becomes one of old-timers among those mayors. Whilst it would be difficult to realise fruitful outcomes in the short term, inter-municipal information sharing can be relatively easy to carry out.” (Interview No. 29)<sup>31</sup>

Apart from the Wide-area Collaboration Summit 2017, Hino City has also sought for a possibility of inter-municipal collaboration, but this action has not still fostered mutual understandings among suburban municipalities (Interview No. 42). Yet, these actions for inter-municipal collaboration would be one hope for the suburban future. However, Hachioji City and Ome City are not members of the Wide-area Collaboration Summit 2017. Moreover, Ome City Government is wondering about what Fussa City Government considers, since Fussa City belongs to both of the Nishi-Tama Network and the Wide-area Collaboration Summit 2017 (Interview No. 42). Presumably, since the member cities of this summit are geographically close one another, they tend to have similar political and policy agendas and priorities, resulting in the greater easiness of inter-municipal collaboration. However, to escape a vicious cycle of suburban shrinkage, inter-municipal collaboration within much wider areas would be required, while being difficult to actualise without any involvements of upper-level government entities.<sup>32</sup>

### **8.5.3 Limited Inter-municipal Collaboration within Policy Domain of Social Welfare Improvement**

There have historically existed some inter-municipal collaborations within Tokyo’s suburban territory. The significant example of inter-municipal collaboration is the Nishi-Tama Network in

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<sup>31</sup> This comment is obtained through an informal talk with the public official of Tachikawa City Government. This comment was confirmed with the public official for citation, so it is classified into Interview No. 29.

<sup>32</sup> For this purpose, suburban municipalities need to “stop thinking of their cities strictly from the inside out, only from the point of view of their own citizens...and look at their communities from the outside in” from a wider perspective (Duany, Plater-Zyberk and Speck, 2000: 154).

the western part of Tokyo's suburban territory, which consists of the following suburban cities: Ome City, Fussa City, Hamura City, Akiruno City, Mizuho Town, Hinode Town, Hinohara Village, and Okutama Village.<sup>33</sup> Public officials in charge of this network commented:

“In the past, GOJ had eagerly promoted the administrative annexations of municipal governments. However, after reaching certain targeted sizes in terms of administrative area, the importance of these annexations was weakened. Consequently, a relevant legal framework was abolished. Besides, TMG has not been proactive in the promotion of inter-municipal collaboration. However, Ome City and neighbouring cities, which have historically possessed strong territorial ties, have spontaneously continued our inter-municipal collaboration as the Nishi-Tama Network...Municipal governments of smaller member cities had benefitted from the spillover effects of administrative skills and know-how from Ome City Government that has comparatively higher administrative capabilities...In reality, the problem of inter-municipal collaboration is cost sharing. After Ome City Government has weakened our fiscal base, we cannot provide considerable incentives...It would be the fact that the perspectives and scopes of the Nishi-Tama Network would not include those of economic and industrial development.” (Interview No. 42)

The perspectives and scopes of the Nishi-Tama Network have been limited mainly within the policy domain of social welfare improvement.<sup>34</sup> As discussed in Chapter 7, municipal governments have not historically been keen to economic and industrial development. However, their reactivity cannot be easily blamed, since it has been generated in a complex manner. That is, municipal governments closest to local communities have been destined to concentrate on social welfare issues.<sup>35</sup> Consequently, the current modes of inter-municipal collaboration, such as the Nishi-Tama Network and the Wide-area Collaboration Summit 2017, have been centred on social welfare improvement, rather than industrial and commercial promotion (except for tourism promotion). Here, tourism promotion aimed at the increase in local consumption would be insufficient to prevent the current rapidity of suburban economic shrinkage. Tokyo's suburban territory needs to become a place of production with wider economic linkages, being buttressed by the trans-municipal sharing of capital and/or resources. Here, inter-municipal collaboration within wider spatial spheres needs to be ensured, rather than that within smaller spatial spheres covered by each key city (such as Tachikawa City, Hachioji City and Ome City) and its neighbouring cities.

In this vein, now is the time to generate new modes of inter-municipal collaboration by shifting emphasis from social welfare improvement to industrial and commercial promotion. At least,

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<sup>33</sup> Within Tokyo's suburban territory, there are two regional administrative councils for inter-municipal collaboration, namely: 1) Tama Western City Regional Administrative Council, called the Nishi-Tama Network, established in 1883, and 2) Tama Northern City Regional Administrative Council, called the Tamarokuto, established in 1987 (Kinu, 2003). Under the Local Autonomy Act of 1947, there are two types of local public cooperatives, namely partial cooperatives and wide-area cooperatives (CLAIR, 2012). These councils are classified as wide-area cooperatives. The Tamarokuto is composed of Kodaira City, Higashimurayama City, Kiyose City, Higashikurume City and Nishitokyo City (former Tanashi City and Hoya City). For example, the Tamarokuto has collaboratively operated the Tamarokuto Science Centre in Nishitokyo City.

<sup>34</sup> Buhnik (2017: 91) notes that “the reform of the Local Autonomy Law in 2014 is pushing for cooperation and agreements between the core urban areas and suburban areas”. However, wider collaborations among local governments in Japan tend to be limited in the policy domain of social welfare improvement, except for tourism promotion.

<sup>35</sup> As for the current main perspectives and scopes of inter-municipal collaboration, see Morita (2003).

inter-municipal information sharing aimed at industrial and commercial promotion could be relatively easily carried out as the first step for inter-municipal collaboration of this sort. However, even if inter-municipal collaboration would be carried out only by municipal governments, its influence would be limited without accesses to urban capital and/or resources of upper-level governmental entities and global economic actors. Moreover, realistically, suburban municipalities do not possess sufficient political powers to appeal to GOJ. For example, the city-to-city consortium for the BCCs has been politically too weak to bring about any significant outcomes, compared with the prefecture-to-prefecture consortium (Interview No. 2).<sup>36</sup> That is, inter-municipal collaboration without any involvements of upper-level governmental entities is too weak to bring out desirable consequences in the current political and administrative system of Japan. Therefore, the proactive involvements of upper-level governmental entities, especially TMG, are required. Besides, there is a possibility for upper-level governmental entities' involvements to trigger new inter-municipal collaboration. Simultaneously, municipal governments need to shift their ways of thinking about inter-municipal collaboration from the social welfare policy domain to the industrial and commercial policy domain. Thus, it is necessary to promote metropolitan-wide revitalisation with wider perspectives and scopes by creating a virtuous spiral from industrial and commercial promotion to social welfare improvement.

## **8.6 Chapter Conclusion: Necessity of New Modes of Inter-municipal Collaboration for Industrial and Commercial Promotion**

One significant feature of Tokyo's suburban restructuring is the divergence of outer suburban municipalities in political and administrative, economic and socio-demographic terms of the three P's. Exploring causal relationships, their multi-dimensional divergence has been created by local differentiations of the metropolitan-wide three I's. In this situation, the emergence of proactivity for industrial and commercial promotion needs to be waited until economic shrinkage would be seriously recognised, partly because of social welfare- and infrastructure-related burdens. Simultaneously, different thoughts and actions have emerged among the key outer suburban cities of Tachikawa City, Hachioji City and Ome City in the policy domain of industrial and commercial promotion. Now, to minimise the multi-dimensional divergence of outer suburban municipalities, it is essential to promote inter-municipal collaboration for industrial and commercial promotion within wider spatial spheres. Nevertheless, the differentiations of policy and planning agendas and priorities among outer suburban municipalities have resulted in the increased difficulty of inter-municipal collaboration. Especially, different thoughts and actions in the industrial and commercial policy domain might magnify the difficulty of inter-municipal

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<sup>36</sup> This prefecture-to-prefecture consortium is called the National Capital Region Summit. This summit was formed in 1979, consisting of the governors of Tokyo Metropolis, Kanagawa Prefecture, Saitama Prefecture and Chiba Prefecture and the mayors of Yokohama City and Kawasaki City. Afterwards, Saitama City, Chiba City and Sagami City joined this summit at the timing when these cities were upgraded to the Designated Cities. For details, see Miyake (2005b).

collaboration in this policy domain. Besides, inter-municipal collaboration only by municipal governments has tended to be limited in the policy domain of social welfare improvement. Now, it is essential to create new modes of inter-municipal collaboration by shifting emphasis towards the policy domain of industrial and commercial promotion. For this purpose, ensuring the proactive involvements of upper-level governmental entities, horizontal inter-governmental integration (among municipal governments) needs to be achieved for suburban economic development, together with vertical governmental and intra-governmental integrations.

## **Chapter 9**

# **New Suburban Challenges: Policy and Planning Implications and Conceptual and Theoretical Contributions to Contemporary Debates**

### **9.1 Towards Future Suburban Sustainability and Regeneration**

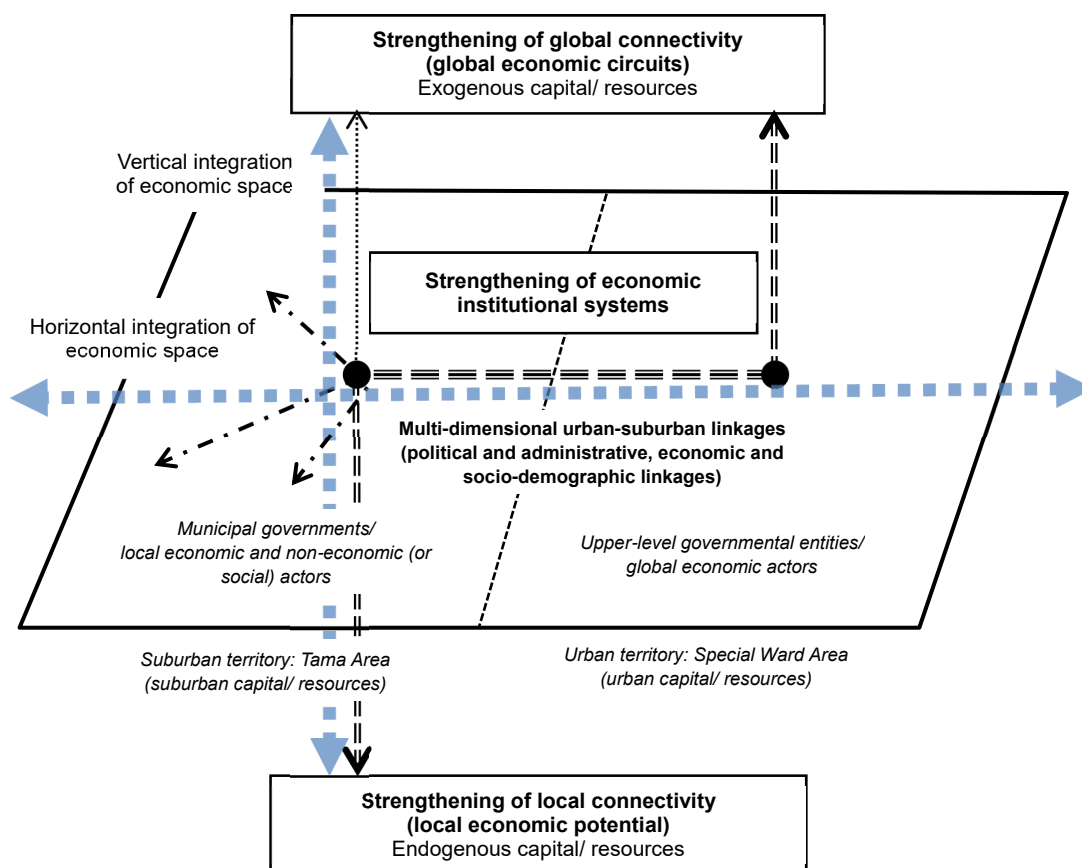
This research explores the path-dependent, multifaceted suburban restructuring of Tokyo Metropolis in the context of stagnation and/or decline. Exploring underlying mechanisms, it is revealed that from a metropolitan perspective, the multi-dimensional suburban isolation in terms of the three P's has been created by the metropolitan-wide dynamics of the three I's. These complex, interactive processes are referred to as 'suburban balkanisation'. Thus, from a local perspective, the multi-dimensional divergence of outer suburban municipalities in terms of the three P's has been created by local differentiations of these metropolitan-wide three I's dynamics. Then, it is argued that integrated suburban economic development under inter-governmental (vertical/ horizontal) and intra-governmental integrations is crucial to prevent further 'suburban balkanisation' and minimise the multi-dimensional divergence of outer suburban municipalities. Considering these, this chapter addresses the following three subjects: 1) policy and planning implications for the suburban sustainability and regeneration of Tokyo Metropolis, 2) applications of lessons learnt from Tokyo's case to other large metropolises worldwide, and 3) conceptual and theoretical contributions to contemporary suburban debates.

### **9.2 Proposed Policy and Planning Implications for Tokyo Metropolis**

#### **9.2.1 New Approach of Integrated Urban-Suburban Economic Development**

For future suburban sustainability and regeneration, the current mechanisms of Tokyo's suburban restructuring need to be structurally altered by shifting emphasis towards suburban economic development. For this purpose, it is necessary to re-consider presuppositions in current political and policy affairs. Does the global competitiveness agenda entail an exclusive focus on Tokyo's urban territory? Is there a way to make more use of Tokyo's suburban territory in this agenda? Is it appropriate to abandon the suburban fortunes accumulated over a long time? What kinds of suburban conflicts should be more eliminated and what kinds of suburban potential should be more exploited? These questions point to the need to re-consider the concept of 'suburban self-containment'. Therefore, challenging this concept, this research proposes the new approach of integrated urban-suburban economic development that ensures

multi-dimensional urban-suburban linkages in political and administrative, economic and socio-demographic terms. A conceptual spatial diagram for this approach is illustrated in Figure 9-1.



Note: The opening of the Yokota Air Base for private-sector use would be one measure for the strengthening of global connectivity, as discussed in Chapter 7. Whilst this opening would promote industrial accumulation within Tokyo's suburban territory, including high-order service industries, the extent of their accumulation would be limited due to the strong magnetic powers of the metropolitan city centre.

Source: Author's own

Figure 9-1 Conceptual Spatial Diagram for Integrated Urban-suburban Economic Development

To tackle foreseen metropolitan shrinkage, it is crucial to achieve the more efficient and effective functioning of metropolitan systems with the maximum use of endogenous and exogenous capital and/or resources, including both urban and suburban ones. Phelps (2015: 8) suggests that "post-suburban communities and their politics can and should be positioned within wider metropolitan urban systems". His suggestion is relevant to this approach. This approach would re-position Tokyo's suburban territory within the vertical and horizontal integrations of economic space under inter-governmental (vertical/ horizontal) and intra-governmental integrations to make the most use of endogenous and exogenous capital and/or resources (see Figure 9-1). Here, multi-dimensional urban-suburban linkages indicate the horizontal dimension of economic space, and global and local connectivity indicate the vertical dimension of economic space. This



re-positioning would clarify the roles and functions of and within Tokyo's suburban territory within the wider context, leading to the elimination of suburban ambiguity and setting of clear suburban visions and strategies for better collaborations among different actors. Consequently, this approach would contribute not only to Tokyo's suburban territory, but also to entire Tokyo Metropolis by ensuring the better functioning of Tokyo's suburban territory as an integral part of the metropolitan-wide system based on the recognition of "the region as an organic unit of economic reality" (Scott and Storper, 2003: 201). Thus, this approach would, in a true sense, achieve 'suburban sustainability', not 'suburban self-containment', by preventing further 'suburban balkanisation'.

In this approach, the government sector would be one of key players. While Phelps (2015: 14) suggests that "any reworking of suburban space will be a political process in which all will need to be involved", his suggestion is applied to this approach. Simultaneously, it is important to be realistic in the face of foreseen metropolitan-wide shrinkage that would limit possible policy and planning solutions. Therefore, rather than targeting all the policy domains, this approach suggests the importance of concentrating specifically on industrial and commercial promotion. However, this approach would contribute not only to economic prosperity, but also to overall well-beings by creating a virtuous spiral from industrial and commercial promotion to social welfare improvement. Thus, through public reforms and interventions in the industrial and commercial policy domain, this approach would create new forms of suburban governance, leading to the establishment of new relationships among public, private and community sectors for suburban economic development.

The emphasis on multi-dimensional urban-suburban linkages stems from the specific political and geographical positioning of Tokyo's suburban territory with the intermediate proximity to the metropolitan city centre. In this regard, this approach is "context-dependent" (Pike, Rodríguez-Pose and Tomaney, 2016: 4). The benefits of this positioning should be maximised, considering that the metropolitan city centre is domestically the strongest political and economic powerhouse that possesses the best accesses to both international and domestic markets. This approach seeks to create urban-suburban relationships in multi-dimensional terms, which enable Tokyo's suburban territory to "overcome such rigid throwbacks to the dichotomies of the old city-suburban scheme" (Young and Keil, 2010: 94), considering that it is important "to frame suburbia as relational" (Mace, 2013: 15). Thus, the creation of multi-dimensional urban-suburban linkages would enable political and administrative, economic and socio-demographic capital and/or resources within Tokyo's urban territory to be exploited for suburban economic development. Thus, this approach would be applied to other large metropolises with similar political and geographical settings.

It is important to set up clear ultimate objectives when concretely considering this approach. Reflecting key findings, these objectives are proposed as follows: 1) strengthening of economic

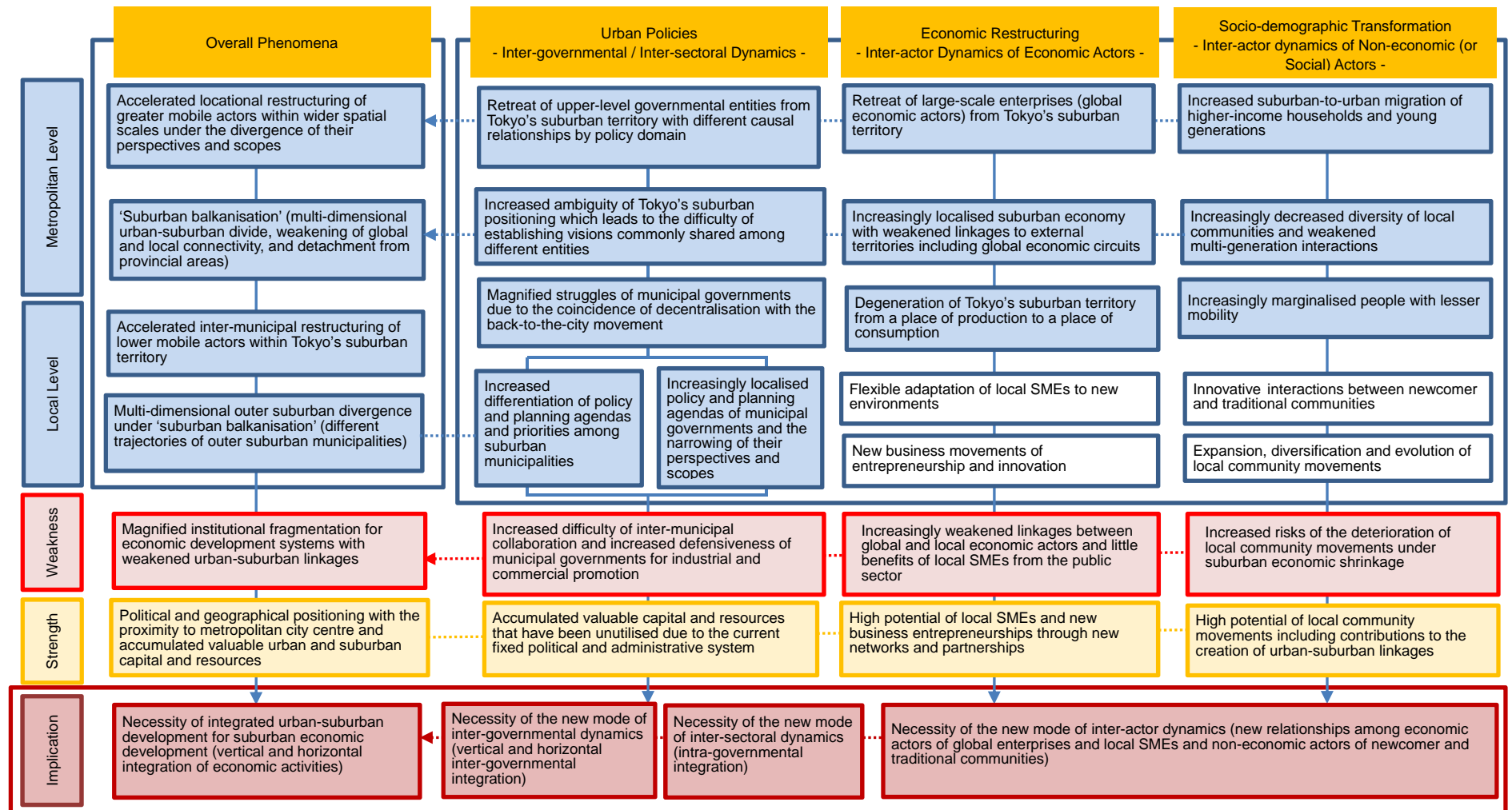
institutional systems: re-forming public administrative systems for strengthening of the multi-dimensional urban-suburban linkages, 2) strengthening of global connectivity: re-creating wider linkages with external territories including global economic circuits, 3) strengthening of local connectivity: re-building local capacities for better exploitation of local economic development potential. Regarding these objectives, the strengthening of global connectivity would enable the exploitation of exogenous factors, and the strengthening of local connectivity would enable the exploitation of endogenous factors. Thus, the strengthening of global and local connectivity would be buttressed by the strengthening of economic institutional systems.

This approach entails new modes of inter-governmental (vertical/ horizontal), inter-sectoral, and inter-actor dynamics of collaboration and cooperation, as discussed below. By creating these new modes of the three I's, this approach would create new suburban platforms for integrated and balanced collaborations among different actors by re-aligning their diverging perspectives and scopes into the same direction. Through this approach, Tokyo's suburban territory would be revived as a place of "importance to the national state" (Phelps, 2010: 73), ensuring adaptability, flexibility and resilience to new suburban challenges in the coming era of metropolitan shrinkage.

### **9.2.2 New Modes of Inter-governmental, Inter-sectoral and Inter-actor Dynamics**

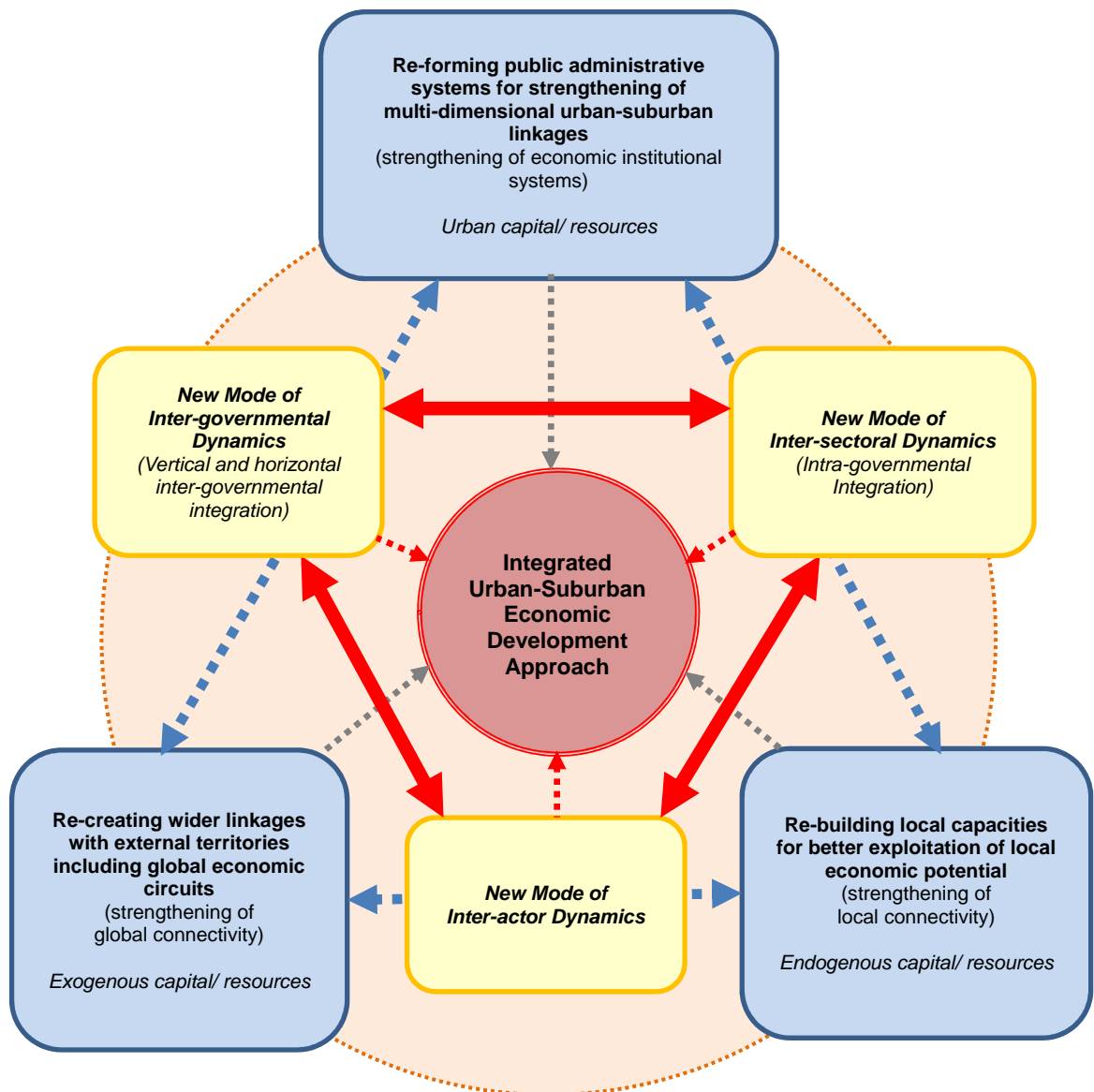
For the new approach of integrated urban-suburban economic development, what new modes of inter-governmental (vertical/ horizontal), inter-sectoral and inter-actor dynamics need to be created? The new modes can be created by re-configuring the strengths and weaknesses of the metropolitan-wide three I's dynamics. That is, the three I's anatomical framework, which is derived from the three P's analytical framework, can be utilised for policy making and implementation as the three I's policy-making framework. Figure 9-2 shows sequential processes to consider new modes of the three I's on the basis of key findings in this research.

These new modes of the three I's would synergistically achieve the ultimate objectives above, each of which is closely linked with the two new modes of the three I's, as illustrated in Figure 9-3. First, the strengthening of economic institutional systems would be attained mainly by new modes of inter-governmental (vertical/ horizontal) and inter-sectoral dynamics. Next, the strengthening of global connectivity would be attained mainly by new modes of inter-governmental (vertical/ horizontal) and inter-actor dynamics. Finally, the strengthening of local connectivity would be attained mainly by new modes of inter-sectoral and inter-actor dynamics. Considering these, concrete policies for each of these new modes are discussed below.



Source: Author's own

Figure 9-2 Towards Policy and Planning Implications based on Major Key Findings



Source: Author's own

Figure 9-3 Relationship of New Modes of Three I's Dynamics to Ultimate Objectives

#### **a) Policies for New Mode of Inter-governmental Dynamics**

As for the new mode of inter-governmental (vertical/ horizontal) dynamics, TMG needs to make stronger commitments for suburban economic development, ensuring better coordination and cooperation with GOJ and municipal governments. Tokyo's suburban territory has fallen into the vicious spiral of shrinkage, which cannot be achieved by individual efforts of municipal governments and local communities without any involvements of upper-level governmental entities. Now, a paradigm shift in the policy domain of industrial and commercial promotion is needed by making institutional reforms.<sup>1</sup> Through this, economic development activities, such as those by the TAMA Association, should be re-strengthened. Under suburban shrinkage, the establishment of a new independent government entity in charge of all suburban policy and planning affairs, or that in charge of the Greater Tokyo Area, is unrealistic.<sup>2</sup> Moreover, GOJ as one potential key player would be unable, or difficult, to make strong commitments only for Tokyo's suburban territory, while being caught in a dilemma between metropolitan and provincial areas. Therefore, it is TMG that should take ownership of Tokyo's suburban territory as the key player for suburban economic development.

The proactive involvement of TMG would contribute to the creation of multi-dimensional urban-suburban linkages, as well as that of vertical and horizontal inter-governmental integrations. TMG has strong potential powers to connect Tokyo's suburban territory to global and domestic markets by exploiting the political and administrative, economic and social channels of the metropolitan city centre. In fact, TMG has been working for multilateral working-level projects with other metropolises worldwide, such as Bangkok, Delhi, Hanoi, Jakarta, Kuala Lumpur, Manila, Seoul, Singapore, Taipei, and Ulaanbaatar.<sup>3</sup> Moreover, TMG would be important to ensure better negotiations with GOJ, because inter-municipal collaboration only by municipal governments has less impacts on GOJ. Moreover, TMG would contribute to facilitating inter-municipal collaboration especially for industrial and commercial promotion, which would be difficult to be achieved only by municipal governments.

In this vein, TMG needs to recognise the great contributory potential of Tokyo's suburban territory for entire Tokyo Metropolis. From the viewpoint of comparative advantages, TMG needs to re-define the roles and functions of and within Tokyo's suburban territory within the metropolitan context by focusing "attention on the 'competitiveness' of local and regional economies as institutions try to provide the conditions that will attract and embed investment" (Pike, Rodríguez-Pose and Tomaney, 2006: 10). TMG needs to make more efforts to explore locally differentiated economic development potential through closer collaborations with

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<sup>1</sup> Pike, Rodríguez-Pose and Tomaney (2016: 9) notes that "[i]nstitutions are critical to the embedding of development in places and ensuring the social and spatial distribution of its outcomes and impacts".

<sup>2</sup> These debates had been repeated during metropolitan growth, but failed to produce any outcomes due to the complexity of political and administrative power relations (e.g. Miyake, 2005a).

<sup>3</sup> For details, see the website of TMG: [www.metro.tokyo.jp/ENGLISH/ABOUT/APPENDIX/appendix04.htm](http://www.metro.tokyo.jp/ENGLISH/ABOUT/APPENDIX/appendix04.htm) [last accessed on 24 December 2017]

municipal governments. In this process, it is essential for TMG to consider how to make linkages between urban and suburban capital and/or resources for suburban economic development.

Considering the above, one possible option of institutional reform and intervention would be to establish a regional economic development agency specialised in suburban economic development, whose headquarters would reside in Tokyo's suburban territory. This agency would serve to accelerate suburban economic development by ensuring vertical and horizontal inter-governmental collaborations with stronger urban-suburban linkages, as well as by setting clearer suburban visions and strategies that can be shared among different actors. From an organisational viewpoint, the agency would be composed of TMG, municipal governments, representatives of global and local economic actors, and representatives of local NPOs and community groups. It would be necessary to carefully consider the way of GOJ's involvements (except for financial supports), partly because it might impede decentralised forms of the agency. Yet, the agency as a new form of suburban alliance and coalition would ensure stronger negotiation powers against GOJ. In this agency, TMG needs to play a key role in bridging GOJ and municipal governments. Simultaneously, to a possible extent, the agency should take decentralised forms that enable the strong involvements of municipal governments and local economic and non-economic (or social) actors. This would be desirable to exploit local economic development potential to the maximum, as Tomaney (2017: 102) notes that "[a] further local and regional dimension of well-being arises from the influences of decentralized institutions". Simultaneously, the agency should make the most use of highly skilled professionals of the private sector, who have specialised in economic and industrial development, to complement the lack of relevant human resources in the public sector.

The agency would contribute to strengthening governmental capabilities through inter-governmental and inter-sectoral sharing of relevant capital and/or resources, such as data, information, knowledge, human resources and networks. Thus, this strengthening of the government sector would contribute to creating private-sector's business opportunities and/or connections within wider markets, such as new business matchings among urban and suburban actors and new supplier-to-supplier and/or supplier-to-customer relationships. Moreover, the agency would support the expansion, diversification and evolution of local community movements possibly into economic activities.<sup>4</sup>

The creation of the agency would be one instance of institutional economic geography approaches, as observed in the recent debates about new regionalism or new regional governance. In fact, the recent post-suburban debates have "attracted some attention within discussion of the functioning and rational government of cities and city regions...in terms of their contribution to the entrepreneurial efforts of established city governments" (Phelps et al., 2006b:

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<sup>4</sup> Soja (2011a: 464) notes that "thinking spatially...might in itself provide useful strategies for mobilizing new and more powerful social movements to deal with the accumulating inequalities, injustices, and oppressions of the contemporary world".

12). This is applied especially to the era of suburban shrinkage, in which the promotion of economic activities at wider spatial scales would be more required. Simultaneously, the agency would need to be developed “over the long run” rather than with “a quick fix” (Tomaney, 2014: 138).

**b) Policies for New Mode of Inter-sectoral Dynamics**

As for the new mode of inter-sectoral dynamics, the government sector, especially municipal governments, needs to adapt their public administration systems and remove inter-sectoral barriers specifically for local economic development. Currently, this adaptation has been delayed due to sectionalism and conservatism fostered during suburban growth, resulting in undermining local economic development potential. Now is the time for each municipal government to alter relationships among administrative sections in different policy domains, aiming at the promotion of inter-sectoral coordination and cooperation. This would enable each municipal government to make the most use of internal capital and/or resources and provide better supports for private and community sectors. Consequently, municipal governments would exploit local economic development potential to the maximum by “focusing upon the mobilisation of local resources and competitive advantages that are locally owned and managed” (Pike, Rodriguez-Pose and Tomaney, 2006: 16).

For this purpose, it is necessary to recognise recent changes in the roles of different policy domains under suburban shrinkage. During suburban growth, even without much coordination with the other two policy domains, the policy domain of urban and infrastructure (re)development had successfully brought together economic and social prosperities, partly resulting in less proactivity for industrial and commercial promotion. Now, this period is almost over in the matured suburban territory. Nevertheless, urban and infrastructure administrative sections would still have a strong sense of being the main player in municipal-level public affairs, and be inclined to work in the similar way as the past. While the policy domain of social welfare improvement has increasingly dominated municipal-level public affairs, social welfare administrative sections have been increasingly desperate with the narrowing of their perspectives and scopes, resulting in less capacities and more defensive thoughts and attitudes for industrial and commercial promotion. Thus, under magnified fiscal and non-fiscal limitations, industrial and commercial administrative sections have continued to focus on local commercial issues without wider perspectives and scopes for suburban economic development. Now, it is necessary for all the administrative sections to foster wider perspectives and scopes to find new ideas and opportunities for local economic development. Alongside this, the policy domain of industrial and commercial promotion should play a lead role with better collaborations with the other two policy domains. Therefore, it is essential to alter inter-sectoral power relations and strengthen the roles of industrial and commercial administrative sections in policy- and decision-making processes. Simultaneously, since municipal governments have failed to foster information, knowledge and

networks for economic and industrial development, it would be required to employ highly skilled professionals of the private sector, including retired people increasingly pooled within Tokyo's suburban territory.

When promoting collaborations between the policy domains of industrial and commercial promotion and social welfare improvement, it should be remembered that from the viewpoint of local economic development, these two policy domains have been increasingly interlinked within the aging suburban territory. Social welfare industries have great potential of expanding business opportunities and accelerating entrepreneurship and innovation (Nagasaka, Ozawa and Nakazono, 2011; W. Suzuki, 2011). This potential includes new technological progresses, such as advanced technologies for elderly and medical care, and new forms of advanced social welfare services that might create new urban models of the aging society. Since these technologies and services can be export industries, social welfare industries can help create wider economic linkages even to global markets.<sup>5</sup> Simultaneously, the bridging between these two domains would create new networks and partnerships among economic and/or non-economic (or social) actors of different industrial sectors, including local SMEs of the manufacturing sector and large-scale enterprises of the social welfare sector. However, currently, social welfare administrative sections have not looked for local economic development potential within social welfare industries, concentrating on the provision of better social welfare services. Therefore, even if social welfare administrative sections have possessed useful data, information, knowledge and networks, these have not been shared with industrial and commercial administrative sections. Consequently, the lack of inter-sectoral collaborations has led to hindering efficient and effective resource utilisation for local economic development.

Moreover, industrial and commercial administrative sections need to vigorously examine and determine desirable functions to be induced for their cities, ensuring better collaborations with urban and infrastructure administrative sections. During suburban growth, most suburban functions had tended to be determined and induced mainly by urban and infrastructure administrative sections without much coordination with those of the other two policy domains. During suburban growth, urban and infrastructure (re)development projects had developed receptacles to accommodate out-migrated functions from Tokyo's urban territory. Thus, these functions had typically been determined under the urban-suburban dynamics of metropolitan growth. Critically speaking, municipal governments have been passive in examining and determining desirable functions, accepting all YIMBY facilities. Even now, while entering suburban shrinkage, urban and infrastructure administrative sections have still retained a fixed way of thinking about functions to be introduced, attempting to attract the same functions as the past. Now, each municipal government needs to seriously work for the inducement of desirable functions by re-thinking the future pathway of their city.

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<sup>5</sup> METI (2013) notes that overseas business expansion of non-manufacturing sectors is the key for national economic growth. Nevertheless, Japan has a lower share of the export values of service industries against GDP, namely 2.6 percent as of 2010, compared with other advanced countries such as the US (3.8 percent), UK (11.4 percent) and France (7.5 percent) (METI, 2013).



This is especially applied to suburban nearby-station developments, which are dominated mainly by residential and commercial development projects. In these projects, municipal governments have failed to persuade private developers to introduce desirable functions, partly due to the lack of relevant human resources. Whilst current legal frameworks, such as development regulations and building codes, cannot prevent private developers' self-serving projects, municipal governments should not miss these limited opportunities in nearby-station areas. Reflecting their future pathways, municipal governments need to vigorously negotiate with private developers, aiming to innovatively stimulate local economic development potential. Industrial and commercial administrative sections need to take part in this process, not only urban and infrastructure administrative sections. Simultaneously, new legal and institutional frameworks should be established by upper-level governmental entities to promote this sort of negotiation, reflecting the intentions of municipal governments and differentiated locational particularities of suburban nearby-station areas. Simultaneously, municipal governments should establish suitable policy tools, even by their local ordinances, to provide better incentives with private developers. Moreover, they need to benefit from inter-governmental personnel exchanges, and absorb private-sector professionals, including retired people.

Furthermore, industrial and commercial administrative sections need to make more collaborations with local communities, not only with local SMEs. Of course, municipal governments need to make more efforts for local SMEs that have benefited little from the public sector. Simultaneously, while municipal governments are the most key entities for local community movements, they have failed to provide better supports to some extent, as discussed in Chapter 7. This failure has led to undermining local economic development potential. Besides, local economic revitalisation would contribute to preventing the degradation of community activities, including interactions between newcomer and traditional communities. Whilst social welfare administrative sections have tended to take charge of local community movements, industrial and commercial administrative sections need to work for the expansion, diversification and evolution of these movements, especially for those with local economic development potential and those creating new urban-suburban linkages.

Considering the above, one possible option of institutional reform and intervention would be for each municipal government to establish a trans-sectoral taskforce as a unified administrative entity specialised in local economic development. This taskforce would pursue new forms of local governance to make the maximum use of local economic development potential. It would enable the integrated trans-sectoral utilisation of data, knowledge, information and networks within each municipal government. It will also serve to make new connections among local economic and/or non-economic (or social) actors, including business matchings among local SMEs and/or large-scale companies of different industrial sectors and cooperative projects between local SMEs and local communities. From an organisational viewpoint, the taskforce

should be integrated into the aforementioned regional economic development agency. Thus, the data, information, knowledge and networks possessed by each taskforce would be integrated at the agency with wider perspectives and scopes to promote the expansion of local economic activities within wider spaces at trans-national, trans-prefectural, and trans-municipal scales.

### **c) Policies for New Mode of Inter-actor Dynamics**

As for the new mode of inter-actor dynamics, it is essential to achieve the following: 1) (re)diversifying suburban actors, 2) creating new networks and partnerships, 3) promoting entrepreneurship and innovation, and 4) (re)strengthening local community movements and facilitating their evolutions into economic activities. These are closely interlinked with one another to achieve the more efficient and effective utilisation of endogenous capital and/or resources, which are important for long-run growth (Romer, 1986, 1990). Thus, this new mode would be reinforced and buttressed by the new modes of inter-governmental and inter-sector dynamics.

Firstly, it is crucial to (re)diversify actors involved in suburban affairs. For this purpose, it is necessary to (re)attract urban actors, especially global economic actors and/or the “Creative Class” (Florida, 2002, 2004), which can contribute to the strengthening of economic and/or socio-demographic urban-suburban linkages. The re-attraction of global economic actors would serve to re-integrate Tokyo's suburban space into global economic circuits through the urban space. However, under the retreat of global economic actors, a new realistic approach would be required. Nearby-station areas with development potential are strategically important areas for actor (re)diversification, being encouraged by well-structured transport and ICTs infrastructures and cheaper land and property costs as one of suburban comparative advantages. However, while being currently dominated by residential and commercial development projects, these areas have increasingly become a place of consumption. Now, it is crucial to consider what needs to be accumulated to re-create a place of production. Priorities should be given to those that can create new values to innovatively stimulate local economic development, as well as those that can strengthen urban-suburban linkages and global and local connectivity. Presumably, desirable functions would include the satellite offices of global companies, entrepreneurship and incubation facilities, and NPO offices working for new local movements. However, it is difficult to accumulate these functions in the short term. Therefore, these functions need to be incrementally accumulated even in the long term in the way of being incorporated into nearby-station projects of the private sector.

Secondly, it is essential to create new networks and partnerships. Actor (re)diversification would contribute to this creation. However, it is important to more strongly promote it, since (sub)urban creativity needs to “be organically developed through the complex interweaving of relations of production, work, and social life in specific urban contexts” (Scott, 2006: 15). New networks and

partnerships take various forms among public, private (global/ local) and community (newcomer/ traditional) sectors. In this vein, it is necessary for municipal governments to investigate the strengths and weaknesses of existing networks and partnerships. Whilst municipal governments have currently provided supports for the expansion of networks and partnerships, especially among local SMEs, their efficiency and effectiveness would be limited due to the lack of inter-sectoral and trans-municipal sharing of data, information and knowledge. Therefore, being supported by the new mode of inter-governmental (vertical/ horizontal), the creation of new networks and partnerships should be promoted at different spatial scales, especially for those between global, urban and local, suburban actors. Simultaneously, being supported by the new mode of inter-sectoral dynamics, it should be promoted among local economic and/or non-economic (social) actors of different policy domains.

Thirdly, it is important to promote business movements contributing to entrepreneurship and innovation. Tokyo's suburban territory is "not just as the product of sterile divisions of labour, but as potentially important site of innovative activities" (Phelps, 2010: 69). There have merged new business movements, as explained in Chapter 7. Tokyo's suburban territory has accommodated various specialists with highly advanced knowledge, technique and skills, including retired people who commuted to the urban space during suburban growth. However, these people would be isolated when retiring or resigning from their companies. Therefore, it is important for the public sector to make the maximum use of these specialists by offering better public supports based on their wishes and needs. Moreover, since entrepreneurship and innovation would be accelerated by well-educated, highly-skilled people with greater motivations, including the "Creative Class" (Florida, 2002, 2004), it is important to attract these people through actor (re)diversification and newly created networks and partnerships.

Fourthly, it is crucial to promote local community movements that can enhance social and economic inclusiveness. These movements which serve to create new "social capital" (Schuller, Baron and Field, 2000) have increasingly become important under suburban shrinkage. These movements would contribute to improving the efficiency and effectiveness of municipal governments' social welfare affairs and widening their capacities for industrial and commercial promotion, partly by expanding a share of mutual assistance against self-help and public assistances. Simultaneously, these movements would contribute to local economic development, since (sub)urban creativity "involves basic issues of citizenship and democracy, and the full incorporation of all social strata into the active life of the city...as a means of giving free rein to the creative powers of the citizenry at large" (Scott, 2006: 15). The expansion and diversification of these movements would increase their possibilities of evolving into economic activities, contributing to the creation of new networks and promotion of entrepreneurship and innovation. Tokyo's suburban territory has a mixed constellation of newcomer and traditional communities that can create different local benefits, in which their interactions have served for the expansion, diversification and evolution of these movements. The success of these movements partly

depends on the existence of leaders, so it is important to facilitate the empowerment of civic society and foster civic leaderships. Considering these, the public sector, especially municipal governments, needs to establish better, equal partnerships with the community sector, being supported by the new modes of inter-governmental (horizontal/ vertical) and inter-sector dynamics. Moreover, since existing legal and institutional frameworks have created some barriers for these movements, upper-level governmental entities need to work for their eliminations.

### **9.3 Lessons Learnt from Tokyo Metropolis: Possible Policy and Planning Implications for Other Large Metropolises Worldwide**

Suburban spaces would experience specific restructurings at different urbanisation stages. There is a possibility that suburban territories of other large metropolises, especially those of rapidly growing large cities in the Asia region, would experience similar issues and problems to Tokyo's suburban territory. Therefore, on the basis of lessons learnt from Tokyo Metropolis, policy and planning approaches, which should be taken especially during suburban growth, are discussed from the perspective of the three I's. These approaches would enable other large metropolises to ensure preparedness or resilience to suburban shrinkage.

#### **a) From an Inter-governmental Perspective**

It is necessary for the government sector to develop sophisticated systems for suburban economic development during suburban growth, incorporating private and community sectors. As observed in Tokyo's case, during metropolitan growth, suburban territories have much chance to attract various industries of global economic actors. However, excessive dependences on their market-driven locational choice behaviours would make governmental entities, especially local governments, disdain continuous efforts for suburban economic development. This would result in undesirable consequences, such as the failure to foster relevant human resources and establish better relationships with global economic actors. Moreover, inter-governmental (vertical/ horizontal) dynamics would change at different stages of urbanisation. There is a possibility that institutional fragmentation for suburban economic development would emerge under suburban shrinkage, as observed in Tokyo's case. Especially in developing countries with relatively centralised systems, upper-level governmental entities would widely engage in urban and infrastructure (re)development during suburban growth, but might recede from suburban territories under future possible suburban shrinkage.<sup>6</sup> Therefore, it is important to establish better suburban economic development systems during suburban growth when sufficient public investments can be made. While these systems need to be

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<sup>6</sup> Upper-level governmental entities engaged in the construction of infrastructures would sometimes transfer them to local governments for their maintenance and operation.

workable even under suburban shrinkage, they would contribute to ensuring preparedness or resilience to future possible shrinkage through the accumulation of tangible and intangible resources during suburban growth. These systems would take various forms by reflecting the specific conditions of each city, differently from the aforementioned policy and planning implications for Tokyo Metropolis. However, when developing these systems, it is necessary to pursue wider economic linkages within different spatial scales, namely trans-municipal, trans-prefectural and trans-national linkages. For this purpose, it is important to consider how to ensure inter-governmental (vertical/ horizontal) integration, urban-suburban linkages, and relationships with global economic actors.

Simultaneously, the timing of decentralisation is important. As observed in Tokyo's case, its delay coincident with suburban shrinkage has magnified the struggles of municipal governments. To avoid this, it is desirable to promote decentralisation during suburban growth to enable local governments to foster tangible and/or intangible resources in all the policy domains and increase their awareness of the importance of widening their capabilities without much reliance on upper-level governmental entities. Of course, it is important to decentralise fiscal resources, not only powers and responsibilities. It would be difficult to promote decentralisation when local governments' capabilities are insufficient, but suburban economic development systems established during suburban growth can be utilised to complement their lack through inter-governmental exchanges of relevant resources. Benefitting from decentralised resources, local governments need to work for better suburban capital formation and the creation of local distinctiveness and attractiveness based on their clear visions, since local identities have increasingly become important under suburban shrinkage. Moreover, alongside the process of decentralisation, it is necessary to optimise administrative jurisdictions to ensure better economic and socio-demographic diversities, since smaller cities with lesser diversities would be damaged by just a few retreats of some actors.

Here, the importance of better suburban capital formation during suburban growth should be emphasised. Tokyo's suburban territory has failed to foster better industrial hierarchies with strong suburban centres prior to the back-to-the-city movement, partly to the lack of strong public interventions for polycentric formation. Therefore, it would be desirable for the government sector to take stronger policy interventions for the formation of suburban centres. However, there have increasingly observed pros and cons in the debates of polycentric formation under the global competitiveness agenda that tends to stress the strengthening of metropolitan city centres, as observed in both Tokyo and London. In this case, even if strong public interventions would be difficult, the aforementioned suburban economic development systems established during suburban growth would contribute to creating better industrial hierarchies with wider economic networks, including those between urban (and global) and suburban (and local) actors.

Furthermore, it is desirable to install the sophisticated systems of metropolitan-wide spatial and functional restructuring during suburban growth. The proactive involvements of upper-level governmental entities have increasingly become important under suburban shrinkage, as observed in Tokyo's case. Needless to say, better urban growth management systems, such as regulatory controls of urbanisation, are important to minimise the difficulty of spatial compactisation. Simultaneously, upper-level governmental entities-owned public lands should be strategically allocated, possibly near suburban railway stations, to ensure the easiness of their public intervention under suburban shrinkage. Whilst these nearby-station areas with greater development potential tend to be utilised by private-sector entities, the public sector should make the best efforts to keep these lands, for instance by lending them to the private sector through fixed-term land leaseholds. Spatial and functional restructuring would increasingly become difficult alongside the progress of urbanisation, especially in the densely built-up areas of matured suburban territories. Therefore, the strategic allocation of these public lands at the earlier stage is desirable as one of the means to ensure spatial flexibility and adaptability against future possible suburban shrinkage.

**b) From an Inter-sectoral Perspective**

It is important for local governments to foster their capabilities for local economic development with better inter-sectoral cooperation during suburban growth, not only relying on market-driven economic growth sustained by urban and infrastructure (re)development. Suburban shrinkage tends to force municipal governments to narrow their perspectives and scopes mainly for social welfare issues, as observed in Tokyo's case. Besides, in addition to their fixed inactivity in industrial and commercial promotion, municipal governments have been slow to change their public administrative systems, resulting in the failure to make the most use of local economic development potential. To avoid this, during suburban growth, local governments should establish the sophisticated systems of inter-sectoral collaborations with keen eyes to local economic development. Thus, they should make the best efforts to foster relevant tangible and intangible resources through the trans-sectoral accumulation of data, information and knowledge and create wider economic networks and partnerships.

Simultaneously, it is important for local governments to minimise future possible burdens related to social welfare services and infrastructure management, leading to more capacities for industrial and commercial promotion. As observed in Tokyo's case, municipal governments have struggled with infrastructure restructuring due to locally differentiated community voices under rapidly growing social welfare burdens. This difficulty might become apparent in rapidly growing large cities in the Asia region, when democratic planning and community participation would prevail. As mentioned above, better urban growth management systems during suburban growth are essential. In addition, together with the strategic allocation of upper-level governmental entities-owned public lands, local governments-owned public lands should be strategically

allocated in a consolidated way, possibly near suburban railway stations. Under population decline and aging, the demands of elderly care facilities would increase alongside decreases in the demands of educational facilities. This strategic allocation would ensure not only the easiness of future public interventions, but also inter-sectoral functional interchangeability in response to demand-supply balances that would change alongside the process of suburban maturity. Simultaneously, this would enable the transfers or sharing of public lands among different tiers of government.

Moreover, it is undesirable to develop social welfare facilities in suburban fringe areas, whilst they tend to be developed in these areas owing to land availabilities and cheap land costs. As observed in Tokyo's case, elderly care facilities in suburban fringe areas have induced the in-migration of elderly people, and large-scale public housing complexes in these areas become the symbols of an aging society. These have magnified municipal governments' social welfare- and infrastructure-related fiscal burdens, including the provision of public transports. Simultaneously, these facilities in suburban fringe areas are less likely to attract private-sector investments for functional conversion or renovation. Therefore, it is necessary for local governments to strategically allocate social welfare facilities during suburban growth by considering future spatial and functional restructuring.

### **c) From an Inter-actor Perspective**

It is necessary for other large cities to establish sophisticated systems for better collaborations among different actors during suburban growth to maintain global and local connectivity even under suburban shrinkage. Tokyo's suburban territory has increasingly been weakening global connectivity, mainly due to the retreat of upper-level governmental entities and global economic actors. Global economic actors would continue to be important for suburban economic development at all stages of urbanisation. Local governments should not consider that they would continue to reside in their cities, since they would make faster, more drastic restructuring than local governments' expectations. Therefore, the governmental entities of other large cities, especially local governments, need to make the best efforts to establish closer networks and build better negotiation skills with global economic actors during suburban growth.

Simultaneously, local governments need to proactively engage in making linkages between global and local economic actors during suburban growth, not only relying on the market mechanism-centred creation of their linkages, on the basis of better understandings of gaps between their needs and requests. In this regard, the aforementioned suburban economic development systems established during suburban growth would help local governments and SMEs build and maintain better relationships with global economic actors, even after their out-migrations. Simultaneously, not only paying attention to linkages among global and local economic actors, local governments need to proactively engage in establishing better relations among local economic and non-economic (or social) actors during suburban growth, especially

those among different policy domains. This would contribute to the expansion, diversification and evolution of both economic and non-economic activities, leading to the strengthening of local connectivity.

Moreover, it is necessary for other large cities to promote better collaborations with local communities during suburban growth. It takes a long time to establish better relationships between public and community sectors and foster community leaders. As observed in Tokyo's case, municipal governments tend to become serious for this sort of collaboration when feeling a sense of crisis about suburban shrinkage. However, the timings of their actions seem too late. Therefore, it is desirable for local governments to take actions at the earlier stage. In this respect, not only the perspective of social welfare improvement, the perspective of industrial and commercial promotion would be important to create economic benefits from community activities. Simultaneously, local governments need to recognise that the continuation of economic prosperity, which might be considered a separate issue for non-economic (or social) activities, is the key to local community movements. Besides, it should be remembered that the out-migration of global economic actors has increased a risk of deteriorating community activities even at a slow pace. Besides, better collaborations with local communities would contribute to creating local distinctiveness and attractiveness, so it is important to share common visions and strategies between public and community sectors. It is also essential to make the most use of distinguished strengths and weaknesses of different communities. It is because newcomer and traditional communities have created different local benefits, and their synergetic interactions have brought better outcomes, as observed in Tokyo's case. For better interactions, different communities would be necessary to be fabricated without much spatial segregations during suburban growth. Thus, local governments need to provide better supports by understanding varied needs and requests among different communities. These actions would contribute to strengthening local connectivity and building sufficient resilience to future possible suburban shrinkage.

## **9.4 Conceptual and Theoretical Contributions to Contemporary Suburban Debates**

### **9.4.1 Tokyo's Suburban Transformation as Typical Suburban Development Process under Suburban Shrinkage**

Finally, on the basis of Tokyo's case, this research attempts to make conceptual and theoretical contributions to contemporary suburban debates, given the "pressing need to consider seriously important elements of commonality alongside difference in international experiences of suburbanization" (Phelps and Wu, 2011: 11). As mentioned in Chapter 3, the significance of this research is signalled in the following three interrelated features, namely: 1) the overall tempo-spatial phenomenon, 2) the multifaceted nature of change, and 3) path-dependent



processes. As for the tempo-spatial feature, this research explores Tokyo's suburban transformation with declining outer suburban municipalities in the spatial context of polycentricity. It is revealed that Tokyo's suburban territory has been degenerating from 'post-suburban' spaces of diverse activities to balkanised spaces that have been increasingly less diverse in political and administrative, economic and socio-demographic terms of the three P's. This story is one that contrasts with the story of 'post-suburban' spaces experiencing the increased strengthening of global integration under polycentric formation (Muller, 1997). In particular, Tokyo's experience is one of the narrowing of suburban trading places (Bogart, 2006) through the weakening of linkages to external territories including global economic circuits. Re-addressing Phelps and Wu (2011)'s framework presented in Chapter 2, Tokyo's suburban transformation can be incorporated into their framework as one of typical post-suburban development processes under suburban shrinkage, as shown in Table 9-1. Here, notably, Tokyo's suburban transformation has embodied multi-dimensional outer suburban divergence in terms of the three P's, namely the different trajectories of outer suburban municipalities. This divergence can be conceived as some sort of a "temporal disparity" (Phelps and Wu, 2011: 2), which can be observed within the contextual transition from growth to shrinkage.

Table 9-1 Tokyo's Suburban Transformation Positioned within  
Phelps and Wu (2011)'s Framework

Modern City	
i.	City → Suburb
Late Modern City Region	
ii.	City → Suburb → Post-suburb
City Region of Second Modernity	
iii.	Post-suburb → City
iv.	Growing suburb → Post-suburb → City
v.	Stable affluent suburb → Stable affluent suburb
vi.	Declining suburb → Sub-suburb?
vii.	City → Suburb
viii. (Tokyo's case)	Post-suburb → Balkanised suburb in political and administrative, economic and socio-demographic terms of the three P's (accompanied with multi-dimensional outer suburban divergence within contextual transition from growth to shrinkage)

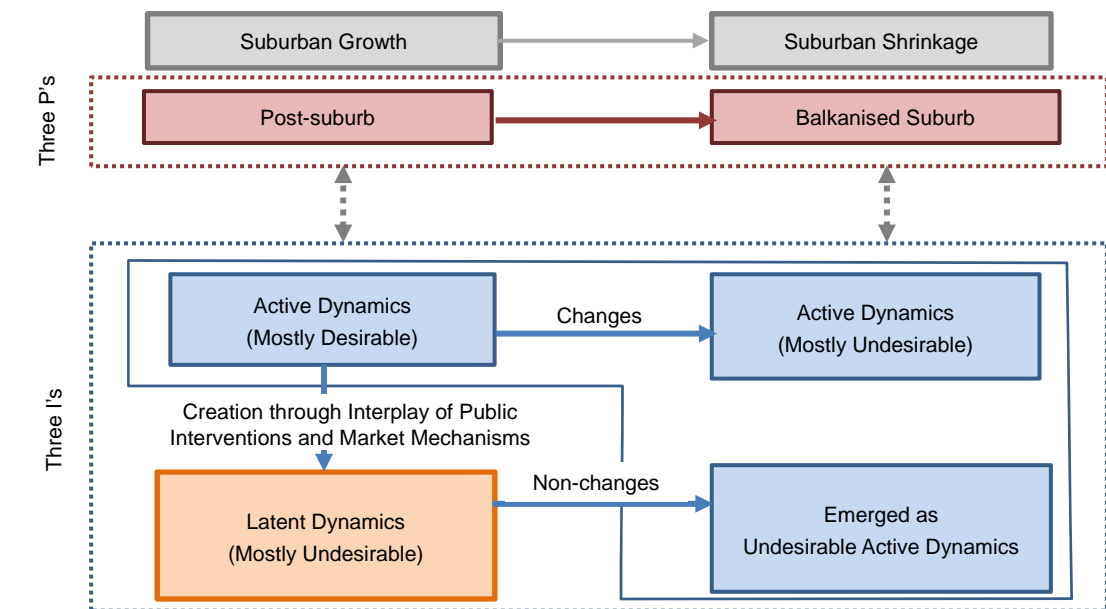
Source: Developed from Phelps and Wu (2011: 6)

Thus, as for the multifaceted and path-dependent features, it is revealed that Tokyo's suburban restructuring of the three P's can be understood as that of the three I's. At the metropolitan level, the multi-dimensional suburban isolation of the three P's has been created by the metropolitan-wide three I's dynamics, which is referred to as 'suburban balkanisation'. At the local level, the multi-dimensional outer suburban divergence of the three P's has been created by local differentiations of the metropolitan-wide three I's dynamics. Thus, it is concluded that the integrated economic development system with the new modes of the three I's is essential to prevent further 'suburban balkanisation' and minimise multi-dimensional outer suburban divergence.

Here, is this multi-dimensional outer suburban divergence under the process of ‘suburban balkanisation’ inevitable, or only specific to Tokyo’s suburban restructuring? Why has Tokyo Metropolis failed to develop the integrated suburban economic development system during suburban growth, given that radical institutional reforms become increasingly difficult under suburban shrinkage? These questions lead to the conceptual and theoretical contributions of this research to contemporary suburban debates. Thus, the three I’s dynamics can be taken further to address these questions by re-framing them into active and latent dynamics from a path-dependent perspective.

#### 9.4.2 Reframing into Active and Latent Dynamics of Three I’s Dynamics from a Path-dependent Perspective

Tokyo’s suburban restructuring of the three I’s can be re-framed as a mixed product of the following two aspects, namely: 1) changes of active dynamics within the contextual transition from growth to shrinkage and 2) non-changes of latent dynamics formed under suburban growth within this transition. During suburban growth, there had existed active and latent dynamics. Through the specific interplay of public interventions and market mechanisms, desirable active dynamics had served to create latent dynamics, which had continued to be obscured under the success of suburban growth. Thus, these latent dynamics formed under suburban growth have, without considerable changes, emerged as undesirable active dynamics under suburban shrinkage. These relationships between active and latent dynamics from a path-dependent perspective are conceptually illustrated in Figure 9-4.



Source: Author's own

Figure 9-4 Conceptual Diagram for Active and Latent Dynamics of Three I’s Dynamics and Their Relationships to Tempo-spatial Phenomena of Three P’s

To explore these latent and active dynamics, the path-dependent perspective is important. Path-dependencies related to suburban transformations can be observed in various dimensions (Ekers, Hamel and Keil, 2015). However, since the public and administrative dimension is slow to change (Soja, 2011a), problematic path-dependencies tend to appear in this dimension. Therefore, latent dynamics formed during suburban growth, which emerge as undesirable active dynamics under suburban shrinkage, tend to exist in this dimension. Thus, these latent dynamics in the political and administrative dimension are reflected especially by inter-governmental and inter-sectoral dynamics.

On the basis of this recognition, it is significant to reflect Tokyo's suburban transformation in consideration of active and latent dynamics by addressing the inevitability of multi-dimensional outer suburban divergence under the process of 'suburban balkanisation' from a more generalised perspective. This reflection allows us not only to explore the causal relationships of the failure to establish the integrated suburban economic development system in Tokyo Metropolis, but also to consider suburban institutional development for other large metropolises. The active and latent dynamics in Tokyo's case, which are discussed below, are summarised in Table 9-2. Here, it should be remembered that the period of suburban growth in this research includes the transition period from the Fordist era to the Post-fordist era.

Table 9-2 Active and Latent Dynamics of Suburban Transformation in Tokyo's Case

Overall Context		Suburban Growth	Suburban Shrinkage
Typical Suburban Development Process		Post-suburb	Balkanised suburb in political and administrative, economic and socio-demographic terms (with multi-dimensional outer suburban divergence)
Three P's Analytical Framework		<ul style="list-style-type: none"> <li>● Change in the relative dynamics between inner and outer suburban territories</li> <li>● Change in the mode of suburban transformation (simple -&gt; complex)</li> <li>● Divergence of outer suburban municipalities vs. convergence of inner suburban municipalities</li> </ul>	
Three I's Anatomical Framework	Inter-governmental Dynamics	<p><b>Active Dynamics</b></p> <ul style="list-style-type: none"> <li>● Proactive involvement of upper-level governmental entities, especially in urban and infrastructure (re)development</li> <li>● Complementary actions of upper-level governmental entities to care about lagging suburban municipalities (reduction of inter-municipal disparities)</li> <li>● Similarisation of policy and planning agendas</li> <li>● Sufficient capacities for inter-municipal collaboration under the shared hope of future co-growth, especially for social welfare improvement</li> </ul> <p><b>Latent Dynamics</b></p> <ul style="list-style-type: none"> <li>● Increased reliance of municipal governments on upper-level governmental entities</li> <li>● Lack of inter-governmental (vertical/horizontal) collaboration in industrial and commercial promotion (under the success of market mechanism-reliant industrial agglomeration)</li> </ul>	<p><b>Active Dynamics</b></p> <ul style="list-style-type: none"> <li>● Retreat of upper-level governmental entities in almost all the policy domains</li> <li>● Strategic selection on relatively advantageous suburban municipalities (widening of inter-municipal disparities)</li> <li>● Differentiation of policy and planning agendas</li> <li>● Less capacities for inter-municipal collaboration even under the increased recognition of intertwined futures</li> </ul> <p>Emerged as undesirable active dynamics</p>
	Inter-sectoral Dynamics	<p><b>Active Dynamics</b></p> <ul style="list-style-type: none"> <li>● Success in industrial attraction through urban and infrastructure (re)development</li> <li>● Less constraints among different policy domains with reliance on debts</li> </ul> <p><b>Latent Dynamics</b></p> <ul style="list-style-type: none"> <li>● Less proactiveness in commercial and industrial promotion and the lack of relevant capital and/or resources (especially networks and partnerships with global economic actors)</li> <li>● Fixed political and administrative system (sectionalism, conservatism, etc.) and the lack of inter-sectoral sharing of data, information, knowledge and networks</li> </ul>	<p><b>Active Dynamics</b></p> <ul style="list-style-type: none"> <li>● Less impacts of urban and infrastructure (re)development on industrial attraction</li> <li>● Increased constraints among different policy domains under severe fiscal conditions</li> </ul> <p>Emerged as undesirable active dynamics</p>
	Inter-actor Dynamics	<p><b>Active Dynamics</b></p> <ul style="list-style-type: none"> <li>● Locational choice behaviours for global economic actors to choose lagging suburban cities especially in the fordist era (manufacturing industries-led)</li> <li>● Lesser local-wide restructuring of local economic and/or non-economic (or social) actors</li> <li>● Strengthening of industrial linkages between global and local economic actors (under market mechanisms)</li> <li>● Increased tensions between newcomer and traditional communities (however, gradually strengthened mutual linkages)</li> </ul> <p><b>Latent Dynamics</b></p> <ul style="list-style-type: none"> <li>● Less recognition of the fragility of market mechanism-led linkages between global and local economic actors</li> <li>● Less recognition of the importance of non-industrial linkages between economic and non-economic (or social) actors</li> <li>● Less recognition of the importance of economic prosperity for the community sector (especially for linkages between newcomer and traditional communities)</li> </ul>	<p><b>Active Dynamics</b></p> <ul style="list-style-type: none"> <li>● Locational choice behaviours for global economic actors to choose leading suburban municipalities especially in the fordist era (service industries-led) (with out-migration from lagging suburban municipalities)</li> <li>● Greater local-wide locational restructuring of local economic and/or non-economic (or social) actors</li> <li>● Weakening of industrial linkages between global and local economic actors (under market mechanisms)</li> <li>● Strengthened linkages between traditional and newcomer communities (however, gradually weakened mutual linkages)</li> </ul> <p>Emerged as undesirable active dynamics</p>

Source: Author's own

#### **a) Active and Latent Inter-governmental Dynamics**

From the perspective of inter-governmental (vertical) active dynamics, upper-level governmental entities would change their ways of intervention into suburban territories from 'complementary actions' to 'choice/selection and focus/concentration actions' within the contextual transition from growth to shrinkage. Although the former actions contribute to reducing inter-municipal disparities, the latter actions lead to widening inter-municipal disparities. During suburban growth especially in the Fordist era, upper-level governmental entities with greater fiscal capacities are prompted to care about lagging suburban municipalities. However, entering suburban shrinkage especially in the post-Fordist era, upper-level governmental entities with lesser fiscal capacities are inclined to place higher priorities on leading suburban municipalities. This takes place alongside the overall retreat of higher mobile actors from suburban territories, accelerating the process of 'suburban balkanisation'. While Phelps (2010: 74) notes that "sub-national, indeed sub-regional, territories are increasingly being 'strategically selected' within this post-Keynesian national state era", this can be applied even at the intra-suburban level, as observed in Tokyo's case. While Tokyo's suburban territory is a "mixed product of both, state presence and state retreat" (Young and Keil, 2010: 90), shifted ways of upper-level governmental entities' interventions serve as the key driver in creating multi-dimensional outer suburban divergence under the process of 'suburban balkanisation'.

Thus, latent, undesirable dynamics formed during suburban growth would be mainly the failure to establish integrated economic development systems. During suburban growth, the success of market mechanism-reliant industrial agglomerations through urban and infrastructure (re)development obscures the necessity to work for the establishment of these systems, even by misleading public officials' confidence in their capabilities for industrial and commercial promotion. Simultaneously, municipal governments' fixed reliance on upper-level governmental entities further worsens this situation. Thus, these result in less proactivity for industrial and commercial promotion, especially for lower-level governmental entities that fail to foster tangible and intangible resources for economic and industrial development.

From the perspective of governmental (horizontal) active dynamics, the conditions of inter-municipal collaboration would change within the contextual transition from growth to shrinkage. During suburban growth, suburban municipalities can share the same, or similar, direction of future co-growth, even if their pre-existing conditions are remarkably differentiated. This offers the prospect of some sort of solidarity, or "growth coalition" (Logan and Molotch, 2007; Molotch, 1976), among suburban municipalities. Sharing some hallucinatory sense of unity, leading suburban municipalities with greater fiscal capacities can support lagging suburban municipalities, leading to the reduction of inter-municipal disparities. Even though leading suburban municipalities feel a sense of inter-city competition, lagging in-between cities can benefit from their competition to grow even more rapidly thanks to spillover effects, as observed in Tokyo's case. Simultaneously, policy and planning agendas are relatively similar among

suburban municipalities, leading to the relative easiness of inter-municipal collaboration. It is partly because the mode of suburban transformation during suburban growth is relatively simpler, compared to that during suburban shrinkage. However, entering suburban shrinkage, suburban municipalities become unable to maintain some common hope of future co-growth, resulting in an increased difficulty of inter-municipal collaboration. Rather than severely competing with one another, leading suburban municipalities with worsened fiscal conditions become desperate only for the governance and management of their own cities and cling to their existing capital and/or resources. Then, they tend to have no room to help lagging suburban municipalities. Besides, policy and planning agendas, especially those of outer suburban municipalities, are increasingly differentiated due to their multi-dimensional divergence, resulting in an increased difficulty of inter-municipal collaboration. Whilst new types of 'anti-suburban shrinkage coalition' might emerge under the increased recognition of intertwined futures, it is difficult for suburban municipalities to bring out fruitful outcomes under the severe conditions of suburban shrinkage. These result in the failure to reduce inter-municipal disparities, leading to further multi-dimensional outer suburban divergence under the process of 'suburban balkanisation'.

Thus, latent, undesirable dynamics formed during suburban growth would be mainly the failure to establish the systems of inter-municipal collaboration in the policy domain of industrial and commercial promotion, under the less necessity to care about it under suburban economic growth. Moreover, inter-municipal collaboration tends to be fixed only in the policy domain of social welfare improvement, partly because municipal governments closest to local communities tend to focus mainly on social welfare issues.

#### **b) Active and latent Inter-sectoral Dynamics**

From the perspective of inter-sectoral active dynamics, the extent of necessity of inter-sectoral coordination would change within the contextual transition from growth to shrinkage, alongside changes in the extent of fiscal constraints. During suburban growth, suburban municipalities would stress economic and/or social infrastructure development together with upper-level governmental entities, and also concentrate on the provision of better social welfare services under less fiscal constraints. Simultaneously, sectionalism serves to make faster decisions and actions required during suburban growth. Even if accumulating fiscal debts, they would continue to develop economic and social infrastructures with the belief that they would be capable of pay back fiscal debts in the future. Since urban and infrastructure redevelopment can upwardly contribute to industrial and commercial promotion, the policy domain of industrial and commercial promotion is less prioritised. However, entering suburban shrinkage, suburban municipalities struggle with social welfare- and infrastructure-related burdens under increasingly limited fiscal burdens. Alongside this, policy and planning agendas have been increasingly localised. Consequently, industrial and commercial promotion with wider economic linkages has increasingly become difficult. From the viewpoint of economic and industrial development, the

policy domains of industrial and commercial promotion and social welfare improvement have increasingly been interlinked within the aging suburban territory. However, sectionalism formed during suburban growth remains unchanged, hindering the effective utilisation of capital and/or resources for local economic development.

Thus, latent, undesirable dynamics formed during suburban growth would be less proactivity for commercial and industrial promotion, the lack of relevant data, information, knowledge and networks, and fixed political and administrative systems, including sectionalism and conservatism. Notwithstanding changes in the mode of suburban transformation and roles of different policy domains, inter-sectoral relationships tend not to change even under suburban shrinkage, resulting in the lack of inter-sectoral sharing of tangible and/or intangible resources.

### **c) Active and Latent Inter-actor Dynamics**

From the perspective of inter-actor active dynamics, the locational choice behaviours of global and local economic and non-economic (or social) actors would change within the contextual transition from growth to shrinkage. In particular, large-scale enterprises' behaviours would change partly due to the economic structural change from the manufacturing industries-led economy to the service industries-led economy. During suburban growth especially in the Fordist era, large-scale enterprises tend to locate their production plants and R&D facilities in lagging suburban municipalities, looking for larger, cheaper lands and lower-waged labour forces. This would contribute to the reduction of inter-municipal disparities. Thus, industrial linkages between large-scale enterprises and local SMEs are strengthened mainly through market mechanisms. While tensions between newcomer and traditional communities would increase, these tend to be gradually softened with time. However, entering suburban shrinkage especially in the post-Fordist era, large-scale enterprises tend to locate their headquarters or branches in leading suburban municipalities with larger agglomerations and higher transportation accessibility, alongside the out-migration of their production plants into NICs. Especially, this out-migration of production plants would seriously damage lagging suburban municipalities, especially if being sustained dominantly by manufacturing industries. This out-migration often triggers the out-migration of local economic and/or non-economic (or social) actors. By contrast, leading suburban municipalities, which can offer better living environments and job opportunities, attract higher-income people or young generations. Besides, the local-wide locational restructuring of lower mobile actors is likely to strongly occur under suburban shrinkage (rather than suburban growth), being triggered by the metropolitan-wide locational restructuring of higher mobile actors. Consequently, these result in widening inter-municipal disparities, leading to further multi-dimensional outer suburban divergence under the process of 'suburban balkanisation'.

Thus, latent, undesirable dynamics formed during suburban growth would involve less recognition of the following: the fragility of market mechanism-led linkages between global and

local economic actors, the importance of non-industrial linkages between economic and non-economic (or social) actors, and the necessity of economic prosperity for the community sector, even for linkages between newcomer and traditional communities. These would be also related to the failure to establish the integrated suburban economic development system during suburban growth.

#### **9.4.3 Towards New Horizons of Contemporary Suburban Debates**

This research reveals that Tokyo's suburban territory has experienced 'suburban balkanisation' accompanied with multi-dimensional outer suburban divergence within the contextual transition from growth to shrinkage. These tempo-spatial phenomena of the three P's have been created by the three I's dynamics that have served as underlying mechanisms, whilst being necessary to more deeply investigate interactions between the three P's and three I's in quantitative terms. Tokyo's suburban transformation incorporated into Phelps and Wu (2011)'s framework can be considered one of typical suburban development processes under suburban shrinkage. While new "nonlocal political relations" (Phelps, 2015: 27) for Tokyo's suburban territory have emerged, changes in inter-governmental dynamics are key elements in Tokyo's suburban transformation. Simultaneously, not only changes in inter-governmental dynamics, but also those in inter-sectoral dynamics have played a key role, especially in the context of the Japanese centralised, sectionalised political and administrative system. Thus, these changes in the government sector have interactively created those in the inter-actor dynamics of public, private and community sectors. Consequently, Tokyo's suburban restructuring has been materialised as a product of "the distinctive mix of interests and politics" (Phelps, 2015: 16). Under the increased necessity to address underlying mechanisms including suburban politics and governance issues (Ekers, Hamel and Keil, 2015; Phelps, 2015; Young, 2015), key findings in this research themselves can be considered conceptual and theoretical contributions to contemporary suburban debates. Moreover, alongside the increased importance of "[s]hifting attention from causes to the context and dynamics of shrinkage" (Großmann et al., 2013: 223), these can also be contributions to the debates of shrinking cities.

Thus, the noteworthy thing is that 'suburban balkanisation' has coincidentally incorporated the multi-dimensional divergence of outer suburban municipalities. Whilst international comparative studies are required, this multi-dimensional divergence within the contextual transition from growth to shrinkage would be considered as one of common features for other large metropolises by reflecting Tokyo's suburban transformation from a generalised perspective as explained above. Other large metropolises might experience this multi-dimensional divergence when entering the decline phase of their outer suburban cities. Importantly, even if being a "temporal disparity" (Phelps and Wu, 2011: 2), the co-occurrence of multi-dimensional divergence with decline processes results in 'contradictory consequences', namely the increased necessity and increased difficulty of inter-municipal collaboration. (Sub)urban shrinkage



processes might internalise multi-dimensional divergence and convergence processes. Now, the inner suburban municipalities of Tokyo Metropolis have currently been revitalised. However, given that (sub)urban shrinking processes will continue to move in an inward direction (towards the metropolitan city centre) under foreseen metropolitan-wide shrinkage, the effects of 'contradictory consequences' might be enlarged, resulting in the difficulty of timely policy making and implementation to prevent continued suburban shrinking processes.

The integrated suburban economic development system would be crucial to prevent 'suburban balkanisation' and multi-dimensional outer suburban divergence. Wider collaborative engagements for suburban economic development would increasingly become required under suburban shrinkage, whilst being necessary to explore how much economic development are required in quantitative terms. Nevertheless, Tokyo Metropolis has failed to establish this system prior to suburban shrinkage. As discussed above, this failure stems from the period of suburban growth, in which latent dynamics inextricably created by desirable active dynamics have obscured the necessity of establishing this system. The problem is that these latent dynamics are more likely to exist in the political and administrative dimension. The mode of suburban transformation changes within the contextual transition from growth to shrinkage, accompanying changes in suburban conflicts and potential. The suburban systems established during suburban growth would become unsuitable when entering suburban shrinkage, resulting in the failure to solve new conflicts and exploit new potential. Considering these, Tokyo's case suggests the necessity to introduce a long-term evolutionary perspective to address latent and active dynamics at different phases of (sub)urbanisation, when developing suburban systems that can ensure flexibility, adaptability and resilience. Thus, considering that the "post-suburban polity is politically reassembled at all institutional state scales" (Keil and Addie, 2015: 906), this perspective would allow us to address the causal relationships of successes and failures in suburban institutional development.

Finally, Tokyo's case suggests the importance of exploring underlying mechanisms from the perspective of the three I's, not only exploring the tempo-spatial phenomena of the three P's that are manifested products of the three I's. Therefore, from an international comparative perspective, it is essential to explore relationships between underlying mechanisms and manifested products, as well as their changes, at different stages of (sub)urbanisation. Simultaneously, it is important to make evolutionary perspective-based investigations into active and latent dynamics at different phases of (sub)urbanisation. Thus, considering that "any reworking of suburban space will be a political process in which all will need to be involved" (Phelps, 2015: 14), multifaceted, path-dependent explorations into underlying mechanisms, including active and latent dynamics, would make significant policy and planning implications about how we need to re-work for future suburban sustainability and regeneration, creating new horizons of the contemporary debates of suburbanisation and post-suburbanisation.

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## **Appendices**



## Appendix A List of Interviews

Interview No.	Interviewee No.	Position	Affiliation		Policy Domain	Spatial Level	Date
1	1	Section Chief	Tokyo Metropolitan Government	Public Sector	Urban and Infrastructure (Re)development	Metropolitan	2015/11/6
	2	Staff					
	3	Staff					
2	4	Department Manager	Tachikawa City Government	Public Sector	Urban and Infrastructure (Re)development	Local	2015/11/9
	5	Section Chief			Comprehensive Planning and Policy Coordination		
	-	Section Chief					
3	6	Professor President	Tokyo Institute of Technology The City Planning Institute of Japan	Academic Sector	Urban and Infrastructure (Re)development	Metropolitan	2015/11/10
4	7	Section Chief	Hachioji City Government	Public Sector	Comprehensive Planning and Policy Coordination	Local	2015/11/11
	8	Section Chief					
	9	Staff					
	10	Staff					
5	11	Section Chief	Hachioji City Government	Public Sector	Urban and Infrastructure (Re)development	Local	2015/11/11
	12	Section Chief					
	13	Staff					
	14	Staff					
6	15	Emeritus Professor	The University of Tokyo	Academic Sector	Urban and Infrastructure (Re)development	Metropolitan	2015/11/11
7	16	Section Chief	Hachioji City Government	Public Sector	Industrial and Commercial Promotion	Local	2015/11/12
	17	Section Chief					
	18	Staff					
8	19	Staff	Hachioji City Government	Public Sector	Industrial and Commercial Promotion	Local	2015/11/12
	20	Staff					
9	21	Section Chief	Tachikawa City Government	Public Sector	Industrial and Commercial Promotion	Local	2015/11/12
-	Section Chief						
10	22	Professor	Hosei University	Academic Sector	Urban and Infrastructure (Re)development	Metropolitan	2015/11/13
11	23	Former Director General	OB of Tokyo Metropolitan Government	Public Sector	Urban and Infrastructure (Re)development	Metropolitan	2015/11/16
	24	Technical Supervisor/ Former Director General					
12	25	Executive Director	CBRE	Private Sector	Urban and Infrastructure (Re)development	Metropolitan	2015/11/16
13	26	Executive Director	The Tachikawa Chamber of Commerce and Industry	Private Sector	Industrial and Commercial Promotion	Local	2015/11/17
	27	Section Chief					
14	28	Secretary General	The Hachioji Chamber of Commerce and Industry	Private Sector	Industrial and Commercial Promotion	Local	2015/11/18
	29	Department Manager					
15	30	President	ALMEC-VPI Corporation	Private Sector	Urban and Infrastructure (Re)development	Metropolitan	2016/1/28
16	31	Professor	National Graduate Institute for Policy Studies	Academic Sector	Urban and Infrastructure (Re)development	Metropolitan	2016/2/4
		Emeritus Professor	The University of Tokyo				
		Former President	Japan Society of Civil Engineers				

Interview No.	Interviewee No.	Position	Affiliation		Policy Domain	Spatial Level	Date
17	32	Assistant Section Chief	Hachioji City Government	Public Sector	Social Welfare Improvement (Elderly Care)	Local	2016/2/23
	33	Staff					
	34	Staff					
18	35	Section Chief	Hachioji City Government	Public Sector	Social Welfare Improvement (Childcare)	Local	2016/2/25
	36	Staff	Hachioji City Government				
19	37	Senior Manager	Mitsubishi Estate Co., Ltd.	Private Sector	Urban and Infrastructure (Re)development	Metropolitan	2016/2/29
20	38	Staff	Hachioji City Government	Public Sector	Social Welfare Improvement (Education)	Local	2016/3/7
	39	Staff	Hachioji City Government				
	40	Staff	Hachioji City Government				
	41	Staff	Hachioji City Government				
	42	Staff	Hachioji City Government				
21	43	Special Advisor Former Secretary-General Former Executive Director Former Director	The Institute for Tokyo Municipal Research Tokyo Association of Mayors Urban Development Bureau, Tokyo Metropolitan Government Urban Development Projects Division, Tokyo Metropolitan Government	Public Sector	Urban and Infrastructure (Re)development	Metropolitan	2016/3/9
22	44	Professor	Kyorin University	Academic Sector	Social Welfare Improvement (Elderly Care)	Metropolitan	2016/3/14
23	45	Section Chief	Tachikawa City Government	Public Sector	Social Welfare Improvement (Education)	Local	2016/5/11
24	46	Section Chief	Tachikawa City Government	Public Sector	Comprehensive Planning and Policy Coordination	Local	2016/5/11
25	47	Section Chief	Tachikawa City Government	Public Sector	Social Welfare Improvement (Health Promotion)	Local	2016/5/11
26	48	Section Chief	Tachikawa City Government	Public Sector	Social Welfare Improvement (Medical Care)	Local	2016/5/11
27	49	Section Chief	Tachikawa City Government	Public Sector	Social Welfare Improvement (Elderly Care)	Local	2016/5/11
28	50	Department Manager	Ome City Government	Public Sector	Comprehensive Planning and Policy Coordination	Local	2016/5/20
	51	Section Chief	Ome City Government	Public Sector			
29	52	Secretary General Former General Manager	Tachikawa City Government	Public Sector	Urban and Infrastructure (Re)development	Local	2016/5/24
30	53	Section Chief	Ome City Government	Public Sector	Urban and Infrastructure (Re)development	Local	2016/6/21
	-	Section Chief					
31	54	Section Chief	Ome City Government	Public Sector	Industrial and Commercial Promotion	Local	2016/6/21
	-	Section Chief					
32	55	Section Chief	Ome City Government	Public Sector	Social Welfare Improvement (Education)	Local	2016/7/13
		Section Chief					
	-	Section Chief					
33	56	Section Chief	Ome City Government	Public Sector	Social Welfare Improvement (Elderly Care)	Local	2016/7/13
	-	Section Chief					

Interview No.	Interviewee No.	Position	Affiliation		Policy Domain	Spatial Level	Date
34	57	Executive Director	The Ome Chamber of Commerce and Industry	Private Sector	Industrial and Commercial Promotion	Local	2016/7/14
	58	Sub General Manager					
	-	Section Chief	Ome City Government	Public Sector			
	59	Staff					
35	60	Staff	Ome City Government	Public Sector	Social Welfare Improvement (Medical)	Local	2016/7/14
	61	Staff					
	62	Staff					
	-	Section Chief					
	-	Staff					
36	63	Section Chief	Ome City Government	Public Sector	Social Welfare Improvement (Childcare)	Local	2016/7/14
	64	Staff					
	65	Staff					
	-	Section Chief					
37	66	General Manager	The Tama Shinkin Bank	Private Sector	Industrial and Commercial Promotion	Metropolitan	2016/8/5
38	67	Representative	Seseragi nōen [The murmuring farm] (NPO)	Community Sector	Social Welfare Improvement	Metropolitan	2016/8/9
	-	Secretary General Former General Manager	Tachikawa City Government				
39	68	Former Staff Former Researcher	Tokyo Metropolitan Government The Institute for Tokyo Municipal Research	Public Sector	Urban and Infrastructure (Re)development	Metropolitan	2016/9/5
40	69	Representative	Ome kodomo-mirai [The future of children in Ome City] (NPO)	Community Sector	Social Welfare Improvement (Childcare)	Local	2016/9/12
	70	Staff	Ome City Government				
41	71	Vice President	Osoki no gakkō to chiiki o kangaeru kai [The community group for schools and surrounding local areas in Osoki]	Community Sector	Social Welfare Improvement	Local	2016/12/17
	72	Member (Staff, Hamura City Government)					
	73	Member					
42	74	Section Chief	The Nishi Tama Network	Public Sector	Comprehensive Planning and Policy Coordination	Metropolitan	2017/2/1
	75	Staff					
	-	General Manager					
	-	Section Chief					
43	76	General Manager	Kodomo-gekijyō Nishi-Tama [The children's theatre for the Western Tama Region] (NPO)	Community Sector	Social Welfare Improvement	Local	2017/2/15
44	77	Town Manager	The Council for the Revitalisation of Central Urban Districts of Ome City	Private Sector	Industrial and Commercial Promotion	Local	2017/4/4
	-	Sub General Manager					
45	78	General Manager	TAMA Association	Private Sector	Industrial and Commercial Promotion	Metropolitan	2017/4/11

Source: Author's own

Appendix B-1 Summary Statistics: Average Values of Employed Variables from Three P's Analytical Framework

Employed Variable				Growth Period (1975 to 1995)				Shrinkage Period (1995 to 2015)			
				All	Inner	Outer	Peri	All	Inner	Outer	Peri
Three P's Analytical Framework	Socio-demographic Transformation (Population)	Stock	1) Population density (pers/ ha)	166.3 [170.1]	203.9 [201.3]	142.1 [149.5]	103.5 [105.5]	164.4 [169.3]	205.5 [203.8]	141.0 [148.6]	71.6 [73.2]
			2) Share of young population (%)	20.9	19.3	22.9	16.8	12.7	12.5	13.4	7.9
			3) Share of productive population (%)	70.9	73.1	69.7	65.7	68.0	69.4	68.7	53.5
			4) Share of elderly population (%)	8.2	7.6	7.4	17.5	19.4	18.1	17.9	38.6
			5) Aging index	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.9
			6) Dependency ratio	0.4	0.4	0.3	1.0	1.6	1.5	1.4	4.9
		Flow (annual growth rate)	7) Population (%)	1.0 [1.2]	0.6 [0.5]	1.8 [1.8]	-1.3 [-1.3]	0.3 [0.6]	0.6 [0.6]	0.3 [0.5]	-2.3 [-2.3]
			8) Young population (%)	-2.0 [-1.8]	-2.4 [-2.4]	-1.2 [-1.3]	-4.6 [-4.4]	-0.7 [-0.2]	0.1 [0.2]	-0.9 [-0.6]	-5.0 [-5.1]
			9) Productive population (%)	1.4 [1.5]	0.9 [0.8]	2.3 [2.3]	-1.7 [-1.7]	-0.6 [-0.3]	-0.1 [-0.1]	-0.7 [-0.5]	-3.6 [-3.7]
			10) Elderly population (%)	5.3 [5.3]	5.2 [5.0]	5.6 [5.6]	3.3 [3.4]	4.1 [4.3]	3.9 [3.8]	4.7 [4.7]	0.3 [0.4]
			11) Number of births (%)	-2.5	-2.7	-1.8	-5.7	-0.8	0.2	-1.0	-5.5
			12) Number of deaths (%)	2.8	2.5	3.1	2.0	2.5	2.4	2.8	0.4
			13) Number of foreigners (%)	4.7	3.6	5.2	7.0	2.6	2.8	2.6	0.5
			14) Number of publicly assisted households (%)	0.1	0.0	(0.4)	(-1.3)	6.6	6.5	(6.8)	(6.3)
			15) Average income (%)	4.9	4.8	5.0	5.2	-0.9	-0.7	-1.1	-1.3
	Economic Restructuring (Production)	Stock	16) Employment density (pers/ ha)	55.3 [58.1]	64.1 [66.4]	50.6 [52.7]	33.0 [34.9]	57.9 [61.6]	65.3 [67.7]	55.9 [58.1]	25.6 [26.4]
			17) Share of primary-sector employment (%)	0.2	0.1	0.1	1.2	0.2	0.2	0.1	1.0
			18) Share of secondary-sector employment (%)	33.0	28.8	35.9	38.7	21.0	16.6	24.2	25.1
			19) Share of tertiary-sector employment (%)	66.8	71.1	64.0	60.2	78.9	83.2	75.8	73.9
		Flow (annual growth rate)	20) Agricultural production (%)	-0.8 [-1.3]	0.0 [-0.5]	-1.7 [-1.9]	1.3 [1.5]	-0.9 [-0.8]	0.3 [0.4]	-1.6 [-1.6]	-3.1 [-3.0]
			21) Manufacturing production (%)	5.4 [6.1]	4.5 [6.4]	6.4 [5.8]	2.8 [2.3]	-3.7 [-2.6]	-5.2 [-4.5]	-2.0 [-1.5]	-7.0 [-7.1]
			22) Commercial consumption (annual sales turnover) (%)	8.4 [7.9]	7.2 [7.3]	10.0 [8.4]	4.5 [5.2]	-1.2 [-1.3]	-1.6 [-1.9]	-0.4 [-0.9]	-4.7 [-5.5]
			23) Establishment (%)	1.7 [1.7]	1.1 [1.1]	2.6 [2.3]	-0.1 [-0.2]	-0.4 [-0.3]	-0.4 [-0.4]	-0.1 [-0.1]	-2.1 [-2.0]
			24) Number of small enterprises (less than 30 persons) (%)	1.7	1.0	2.5	0.0	-0.4	-0.4	-0.2	-2.3
			25) Number of non-small enterprises (30 persons and over) (%)	3.8	3.3	4.8	0.1	1.3	1.0	1.5	1.0
			26) Employment (%)	2.8 [2.9]	2.2 [2.3]	3.7 [3.5]	0.0 [-0.5]	0.2 [0.3]	0.1 [0.0]	0.5 [0.5]	-1.5 [-1.4]
			27) Secondary-sector employment (%)	1.3	0.4	2.4	-1.5	-2.4	-3.0	-1.7	-3.3
			28) Tertiary-sector employment (%)	3.6	3.0	4.6	0.9	0.9	0.8	1.3	-0.9
			29) Number of NPOs (%)	-	-	-	-	19.3	19.0	19.3	21.5
			30) Land Price (%)	7.5	7.0	7.9	7.8	-2.7	-2.1	-2.9	-4.5
	Urban Policies (Political and Administrative - Fiscal) (Policies)	Stock	31) Municipal tax revenue per resident (thousand Yen)	116.8	122.3	117.9	73.2	156.9	162.0	159.4	104.7
			32) Municipal expenditure per resident (thousand Yen)	224.8	192.9	219.4	472.2	347.0	305.6	321.1	810.2
			33) Share of social welfare expenditure (%)	20.8	23.8	20.1	6.0	34.9	36.3	35.7	19.9
			34) Share of commercial and industrial expenditure (%)	0.7	0.6	0.7	1.5	1.0	0.4	1.1	4.2
			35) Share of public work expenditure (%)	18.7	18.7	19.9	10.3	12.6	13.2	12.3	10.9
			36) Financial index	0.92	1.01	(0.91)	0.35	0.97	1.05	0.98	0.34
		Flow (annual growth rate)	37) Municipal tax revenue (%)	8.5 [8.5]	8.0 [7.9]	9.3 [9.2]	6.1 [5.4]	0.3 [0.5]	0.6 [0.6]	0.2 [0.3]	-1.5 [-1.6]
			38) National grants-in-aid (for non-flexible use) from GOJ (%)	3.8 [3.9]	4.2 [4.3]	3.4 [3.6]	3.7 [4.1]	4.8 [4.9]	4.8 [4.7]	5.3 [5.1]	1.9 [1.2]
			39) Local allocation tax (for flexible use) from GOJ (%)	0.0 [1.9]	-2.0 [0.1]	0.7 [2.8]	8.1 [8.1]	2.3 [2.2]	2.2 [3.1]	2.6 [1.9]	0.2 [0.3]
			40) Metropolitan grants-in-aid from TMG (%)	9.1 [8.9]	9.2 [9.2]	8.9 [8.5]	10.2 [10.0]	1.8 [1.7]	1.7 [1.5]	2.0 [1.9]	1.8 [1.8]
			41) Municipal expenditure (%)	7.1 [7.0]	6.8 [6.8]	7.3 [7.2]	7.9 [7.8]	0.9 [1.0]	0.8 [0.9]	1.0 [1.1]	0.2 [0.2]
			42) Social welfare expenditure (%)	8.8 [8.5]	8.3 [8.3]	9.1 [8.7]	9.5 [9.1]	3.9 [4.2]	3.8 [3.8]	4.4 [4.6]	1.2 [1.4]
			43) Commercial and industrial expenditure (%)	9.5 [8.5]	7.3 [7.3]	9.2 [8.5]	25.3 [21.3]	1.7 [0.1]	2.2 [1.3]	2.0 [-0.3]	-3.1 [-1.5]
			44) Public work expenditure (%)	9.3 [8.6]	10.3 [9.6]	8.9 [7.7]	5.6 [5.9]	-2.6 [-2.9]	-3.3 [-3.1]	-2.8 [-2.8]	3.3 [3.3]

Note: 1) Numbers outside square brackets are calculated by taking averages against calculated numbers for an individual suburban municipality. Numbers inside parentheses are numbers calculated after supplementing unfound numbers. Numbers inside square brackets are numbers for entire, inner, outer and peri-suburban territories from an aggregate viewpoint.

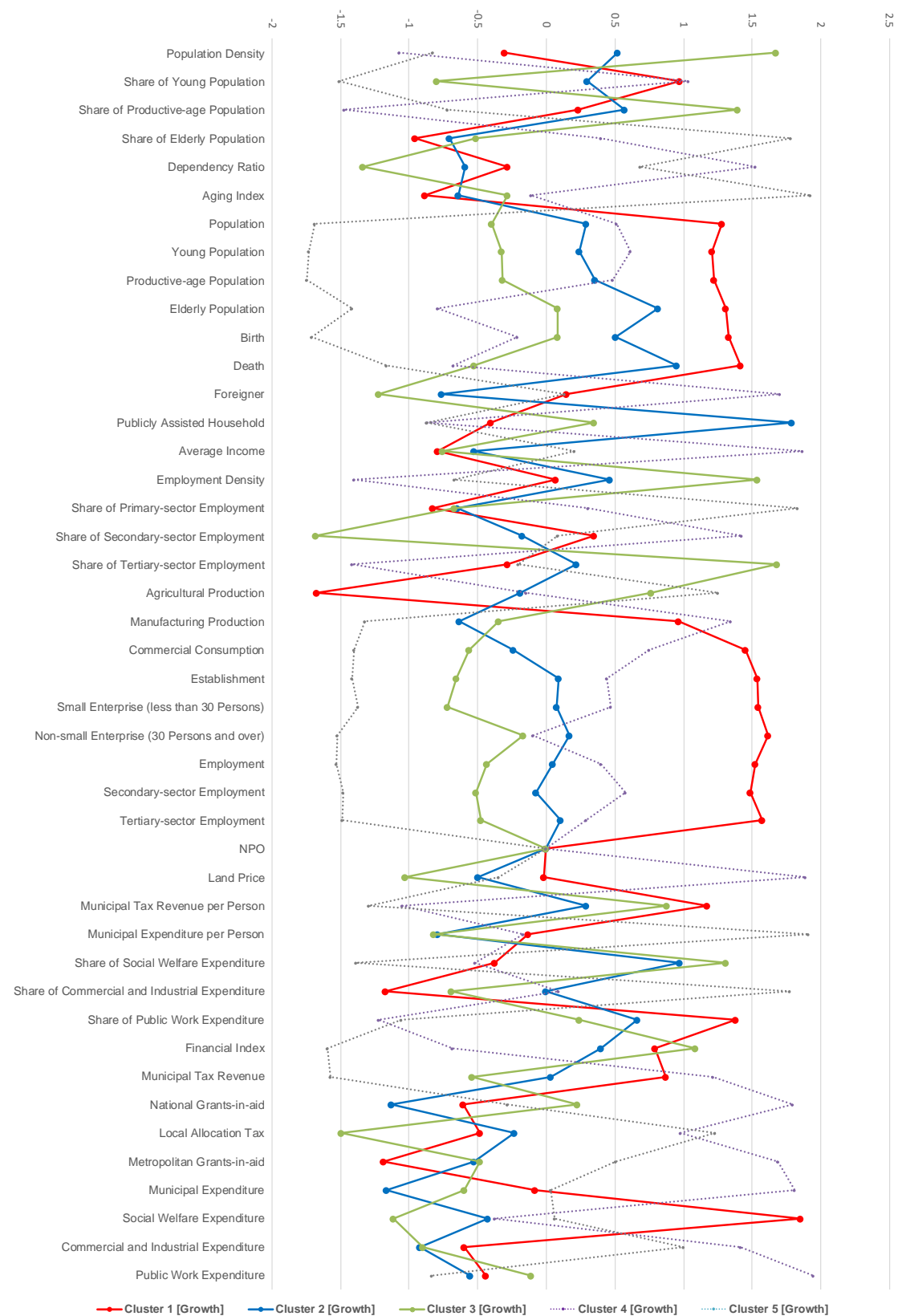
2) Developed areas (not administrative areas) are utilised for the calculation of population and employment densities.

Source: Author's own

Note: Calculated after supplementing unfound data for publicly assisted households related to the Nishi-tama District and the fiscal index (as of 1985) for Akiruno City.  
Source: Author's own

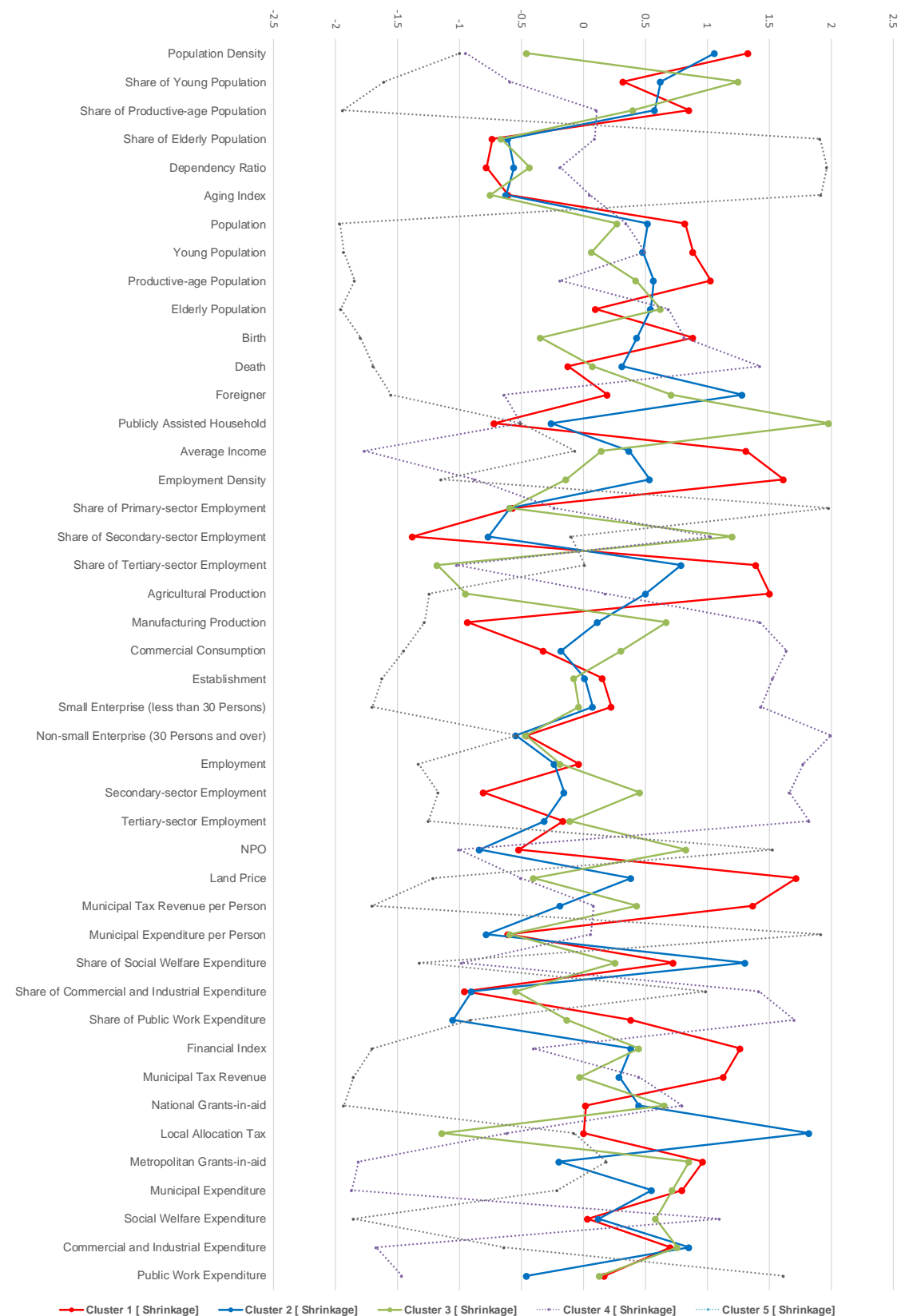
Source: Author's own

## Appendix B-2-2 Correlations among Employed Variables for Shrinkage Period of '1995 to 2015'



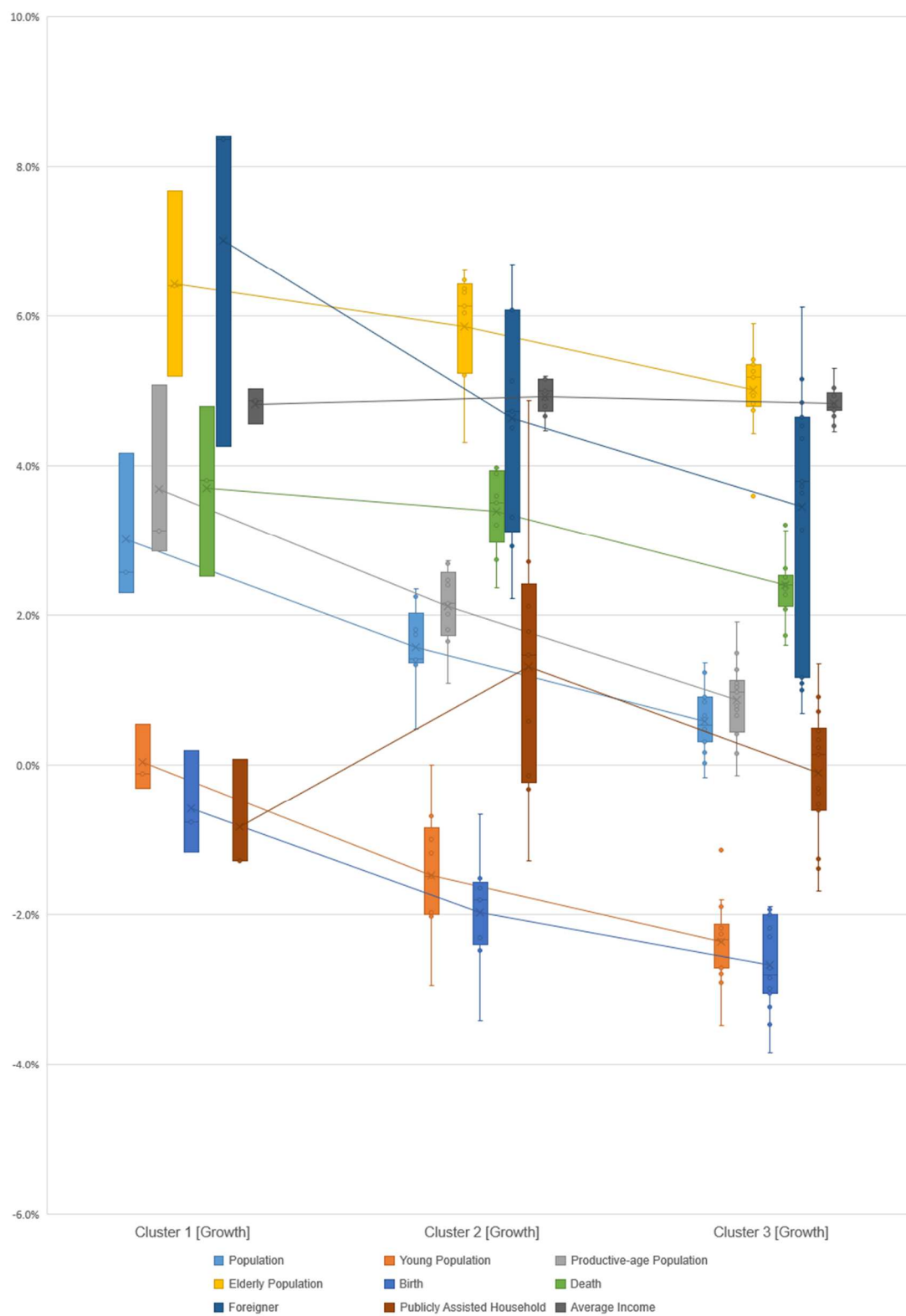
Note: Calculated after supplementing unfound data for publicly assisted households related to the Nishi-tama District and the fiscal index (as of 1985) for Akiruno City.  
Source: Author's own

### Appendix B-3-1 Standardised Average Values of Employed Variables for Growth Period of '1975 to 1995'



Appendix B-3-2 Standardised Average Values of Employed Variables  
for Shrinkage Period of '1995 to 2015'

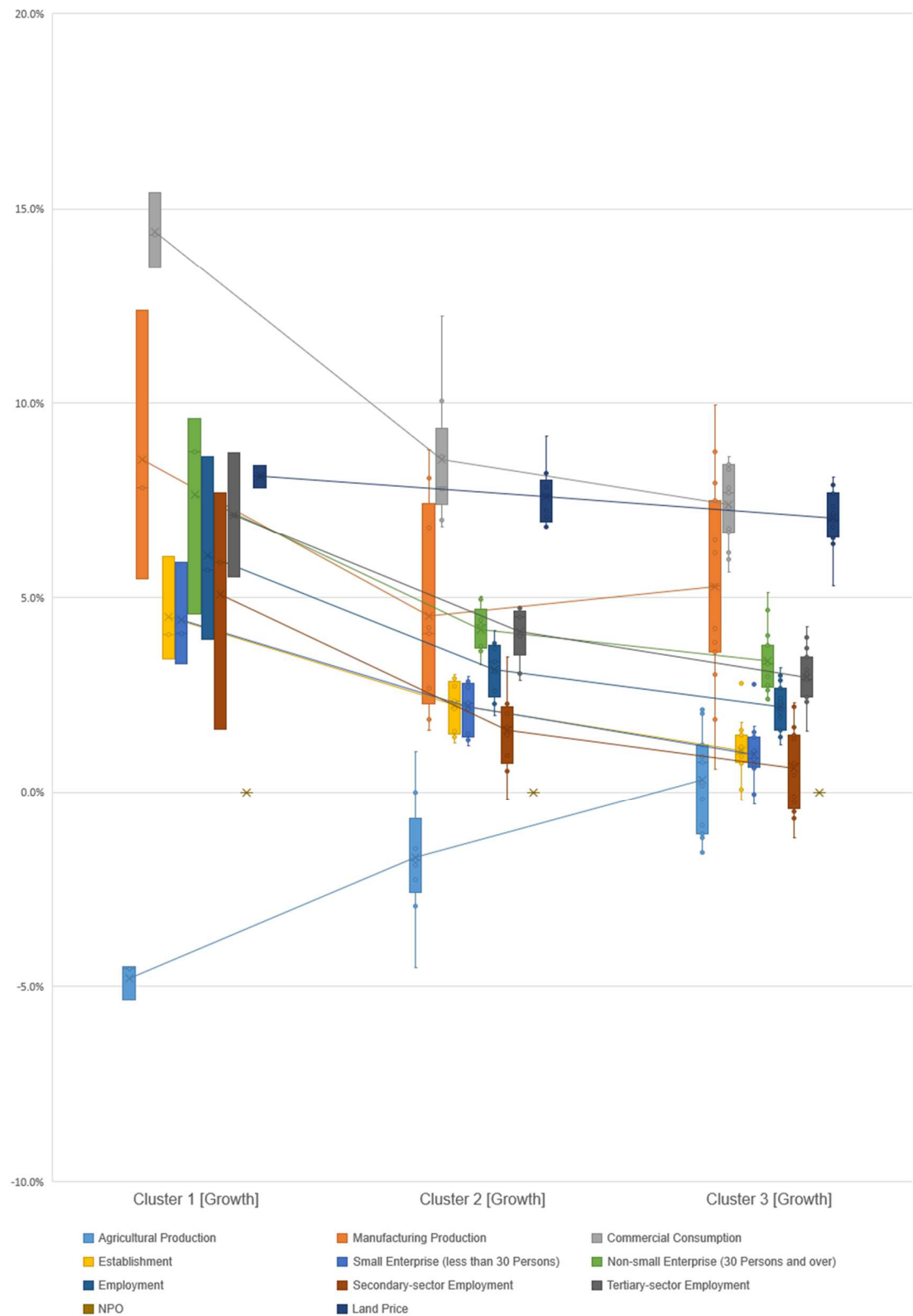




Note: Calculated after supplementing unfound data for publicly assisted households related to the Nishi-tama District.

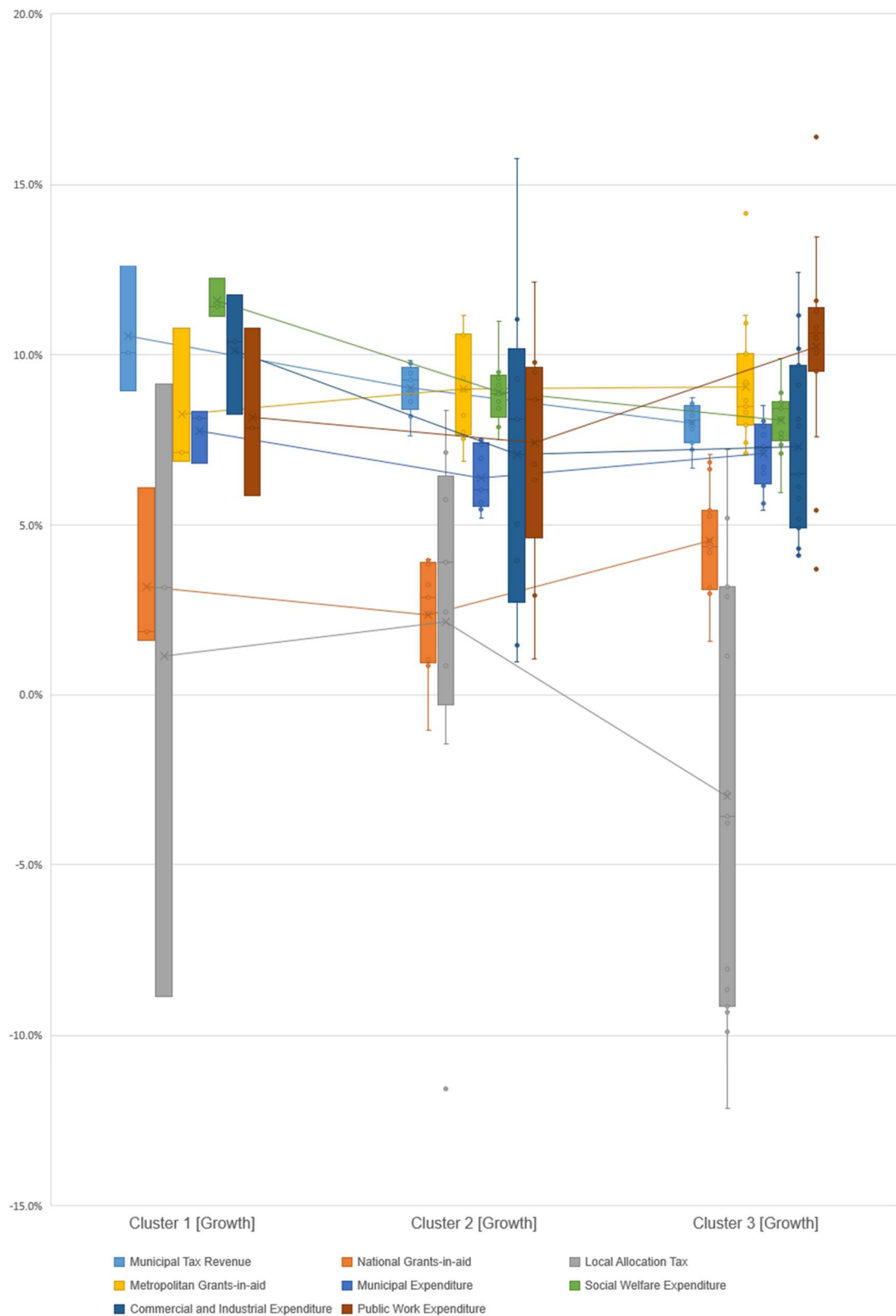
Source: Author's own

Appendix B-4-1 Box-and-whisker Plot of Socio-demographic Variables  
for Clusters 1 to 3 [Growth] during '1975 to 1995'



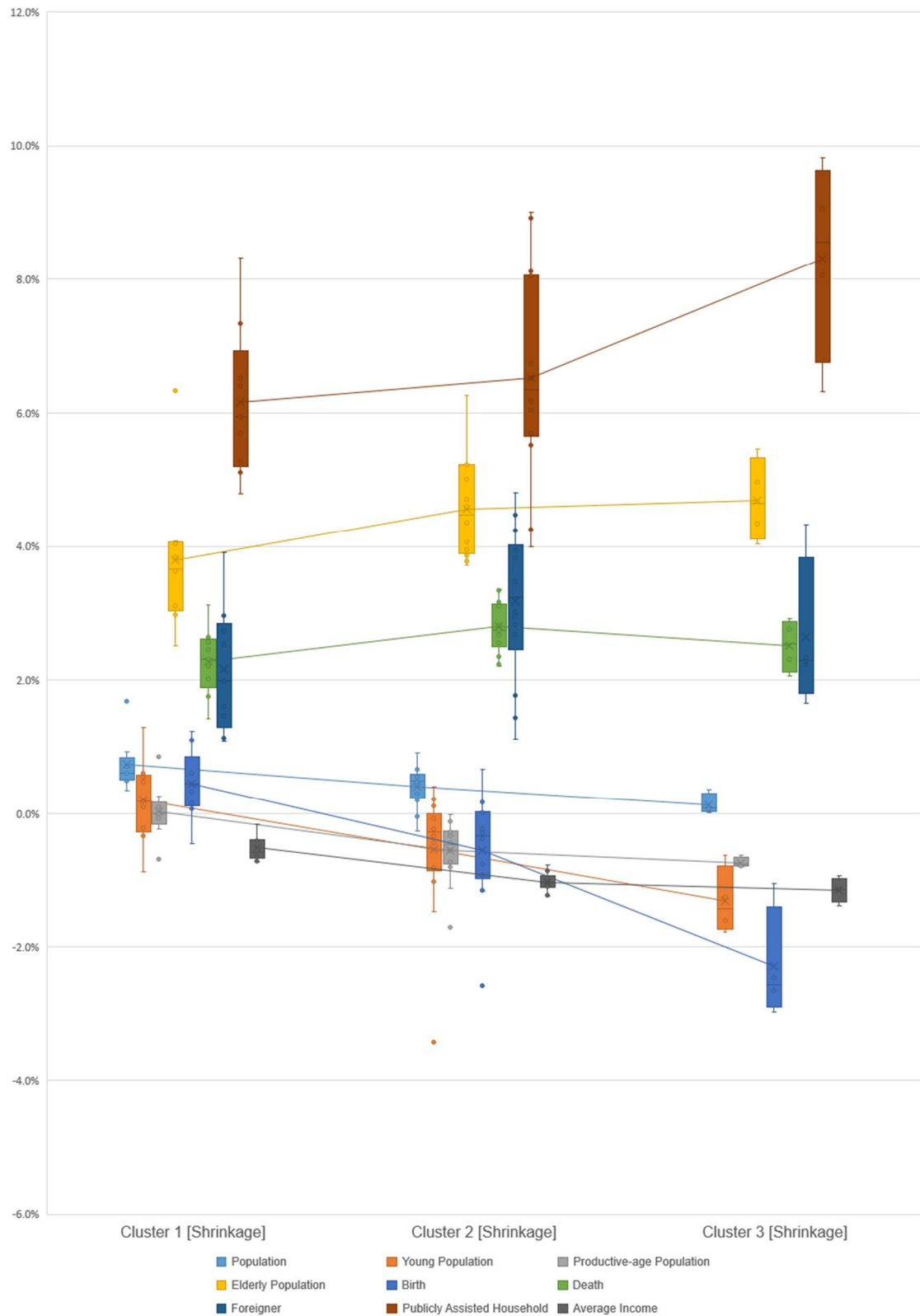
Source: Author's own

Appendix B-4-2 Box-and-whisker Plot of Economic Variables  
for Clusters 1 to 3 [Growth] during '1975 to 1995'



Source: Author's own

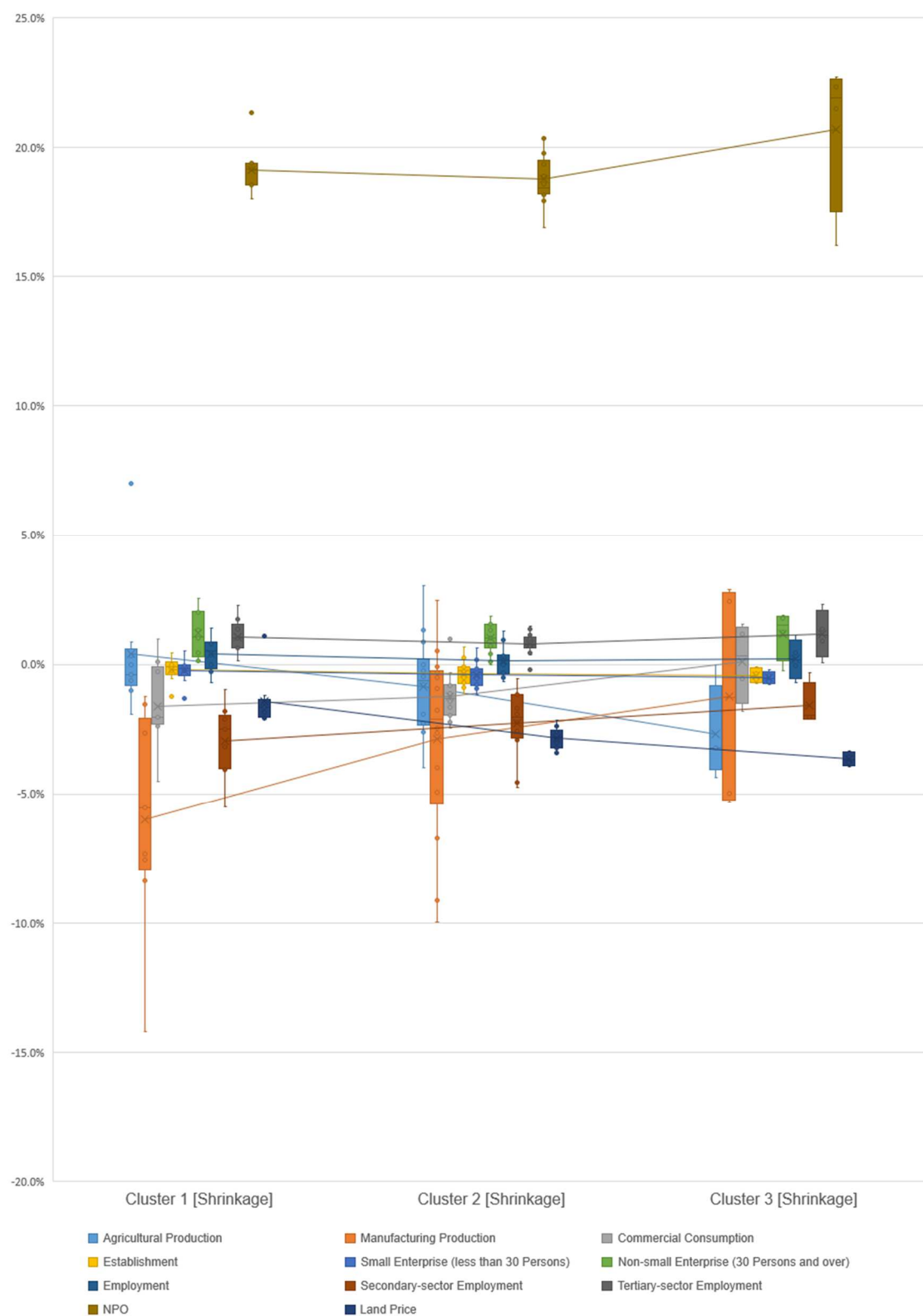
Appendix B-4-3 Box-and-whisker Plot of Political and Administrative (Fiscal) Variables for Clusters 1 to 3 [Growth] during '1975 to 1995'



Note: Calculated after supplementing unfound data for publicly assisted households related to the Nishi-tama District.

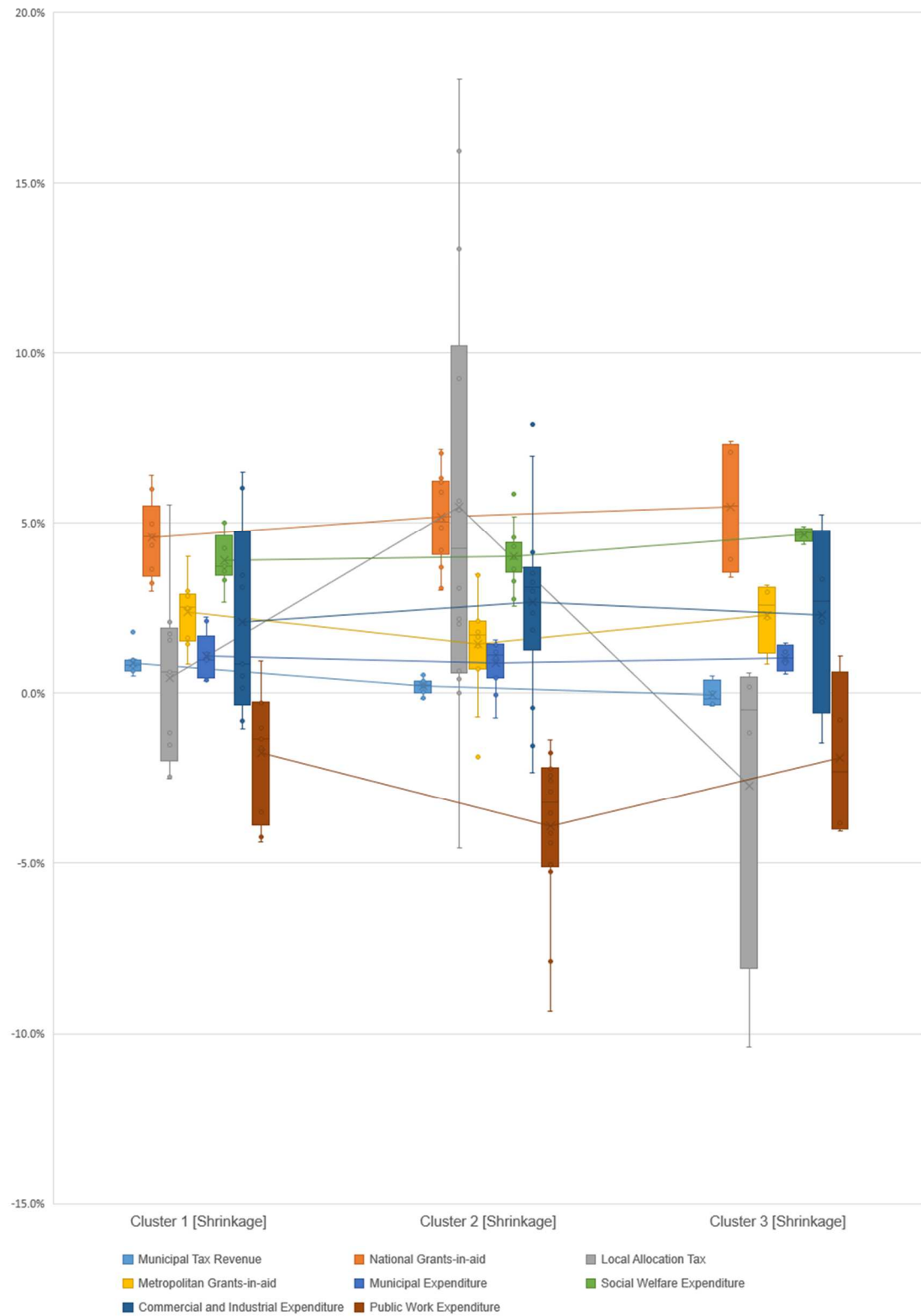
Source: Author's own

Appendix B-4-4 Box-and-whisker Plot of Socio-demographic Variables  
for Clusters 1 to 3 [Shrinkage] during '1995 to 2015'



Source: Author's own

Appendix B-4-5 Box-and-whisker Plot of Economic Variables  
for Clusters 1 to 3 [Shrinkage] during '1995 to 2015'



Source: Author's own

Appendix B-4-6 Box-and-whisker Plot of Political and Administrative (Fiscal) Variables for Clusters 1 to 3 [Shrinkage] during '1995 to 2015'